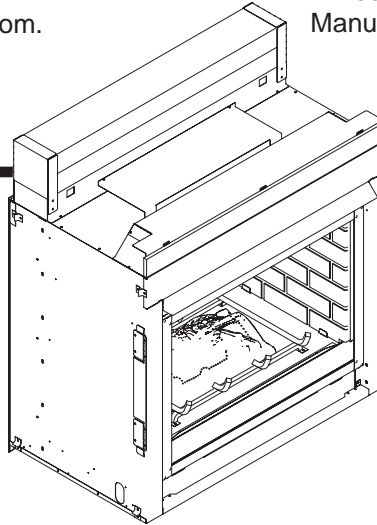


HEAT&GLO
LifeStyleCollection™

Owner's Manual

Installation and Operation

Model:
Twilight-II-B



GAS-FIRED



CAUTION



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

DO NOT
DISCARD

⚠ WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **What to do if you smell gas**
 - Do not try to light any appliance
 - Do not touch any electrical switch. Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, *Title 24 CFR, Part 3280* or *Standard for Installation in Mobile Homes, CAN/CSA Z240MH*.

This appliance is only for use with the type(s) of gas indicated on the rating plate.

⚠ WARNING



HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.

Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers open or removed.
- Keep clothing, furniture, draperies and other combustibles away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. Do NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

In the Commonwealth of Massachusetts:

- installation must be performed by a licensed plumber or gas fitter;

See Table of Contents for location of additional Commonwealth of Massachusetts requirements.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.

Read this manual before installing or operating this appliance.
Please retain this Owner's Manual for future reference.

Congratulations

Congratulations on selecting a Heat & Glo LifeStyle Collection gas appliance—an elegant and clean alternative to wood burning appliances. The Heat & Glo LifeStyle Collection gas appliance you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new appliance, you'll want to read and carefully follow all of the instructions contained in this *Owner's Manual*. Pay special attention to all Cautions and Warnings.

This *Owner's Manual* should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

The information contained in this *Owner's Manual*, unless noted otherwise, applies to all models and gas control systems.

Your new Heat & Glo LifeStyle Collection gas appliance will give you years of durable use and trouble-free enjoyment. Welcome to the Heat & Glo LifeStyle Collection family of products!

Homeowner Reference Information

We recommend that you record the following pertinent information about your appliance.

Model Name: _____ Date purchased/installed: _____

Serial Number: _____ Location on appliance: _____

Dealership purchased from: _____ Dealer Phone: _____

Notes: _____

Listing Label Information/Location

The model information regarding your specific appliance can be found on the rating plate usually located in the control area of the appliance.

Type of Gas

Gas and Electric Information

Model Number

Serial Number

This product may be covered by one or more of the following patents: (Nos produits sont couverts par un ou plusieurs des brevets suivants): (United States) 4593510, 4668807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543696, 6550687, 6601579, 6672860, 668630282, 671572482, 6729551, 6736133, 6748940, 6748942, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408; or other U.S. and foreign patents pending (ou autres brevets américains et étrangers en attente).

HEAT & GLO
LifeStyleCollection

Heat & Glo, a brand of Hearth & Home Technologies, Inc.
20802 Kensington Boulevard, Lakeville, MN 55044

GAS-FIRED
UL
LISTED

Not for use with solid fuel.
(Ne doit pas être utilisé avec un combustible solide).

Type of Gas (Sorte De Gaz): **NATURAL GAS**

This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 In the USA or CAN/CGA B149 Installation codes. (Installer l'appareil selon les codes ou règlements locaux ou, en l'absence de tels règlements, selon les codes d'installation CAN/CGA-B149.)

ANSI Z21XX-XXXX · CSA 2.JX-MXX · UL307B

Minimum Permissible Gas Supply for Purposes of Input Adjustment.

Approved Minimum (De Gaz) Acceptable	0.0 in w.c.	(Po. Col. d'eau)
Maximum Pressure (Pression)	0.0 in w.c.	(Po. Col. d'eau)
Maximum Manifold Pressure (Pression)	0.0 in w.c.	(Po. Col. d'eau)
Minimum Manifold Pressure (Pression)	0.0 in w.c.	(Po. Col. d'eau)

Total Electrical Requirements: 000Vac, 00Hz., less than 00 Amperes

MADE IN USA

ALTITUDE:	0-0000 FT.	IN CANADA	0000-0000FT.
MAX. INPUT BTUH:	00,000		00,000
MIN. INPUT BTUH:	00,000		00,000
ORIFICE SIZE:	#XXXXX		#XXXXX

Model: **XXXXXXXX**

Serial (Serie): **XXXXXXXX**

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➔ = Contains updated information.

1 Listing and Code Approvals

A. Appliance Certification

MODEL: Twilight-II-B
LABORATORY: Underwriters Laboratories, Inc. (UL)
TYPE: Direct Vent Gas Appliance
STANDARD: ANSI Z21.50-2003 • CSA2.22-M03 • UL307B

This product is listed to ANSI standards for “Vented Gas Appliances” and applicable sections of “Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles”, and “Gas Fired Appliances for Use at High Altitudes”.

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE.

This appliance is tested and approved as either supplemental room heat or a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** and **CPSC 16 CFR 1202** (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with **CPSC 16 CFR Section 1201.5** “Certification and labeling requirements” which refers to **15 U.S. Code (USC) 2063** stating “...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered.”

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the **National Fuel Gas Code, ANSI Z223.1-latest edition** in the U.S.A. and the **CAN/CGA B149 Installation Codes** in Canada.

C. Thermal Performance Data

Model: Twilight-II-B		
Sound Transmission Class (STC)	Thermal Resistance (R Value)	Thermal Conductivity (K Value)
27	0.08hr-sq ft-°F/BTU	12.5 BTU-in/hr-sq ft-°F

D. Air Infiltration, Water Resistance and Structural Tests

The Hearth & Home Technologies Twilight-II-B Indoor/Outdoor Appliance unit was tested to the following ASTM standards at the Stork Twin City Testing laboratory.

Air infiltration test **ASTM:E283-(04)**. The sample was tested at 1.57 psf (equivalent to a 25-mph windload).

Water resistance test **ASTM:E331-00**. The test specimen was tested at the requested test pressures of 8.0 & 25.0 psf.

Structural test **ASTM:E330-02**. The unit was tested to a design pressure of 50-psf, a test pressure of 75-psf.

Test Results

Model	Air Infiltration (ASTM E283)	Water Resistance (ASTM E331)	Structural Load (ASTM E330)
Twilight-II-B Indoor/Outdoor	0.07CFM/ft2	No leakage @ 8psf & 25psf	No Blowout @ 75psf

E. BTU Specifications

Model <small>U.S. (0-2000 FT) or Canada (2000-4500 FT)</small>		Input BTU/h	Orifice Size (DMS)
Twilight-II-B (NG)	US	38,000	32
	CAN	34,200	33
Twilight-II-B (LP)	US	37,000	50
	CAN	33,300	51

F. High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with local gas utility.

If installing this appliance at an elevation above 4500 feet (in Canada), check with local authorities.

WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

G. Non-Combustible Materials Specification

Material which will not ignite and burn are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof. Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C**, shall be considered non-combustible materials.

H. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered shall be considered combustible materials.

Note: The following requirements reference various Massachusetts and national codes not contained in this document.

I. Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, **“GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”**.

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System **NOT** Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:

- The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
- The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

2 Getting Started

A. Design and Installation Considerations

Heat & Glo direct vent gas appliances are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside. No additional outside air source is required.

The Twilight-II-B has been carefully engineered to provide a unique fireplace experience. Since it is different than any other product on the market, care must be taken when installing this appliance so that our customer does not experience undesirable performance or conditions.

1. Install the appliance according to this Owner's Guide paying particular attention to flashing and sealing instructions.
2. In the cold northern climates pay attention to exposures and prevailing wind conditions when locating the appliance, the same as you would for locating exterior windows and doors.

The Twilight-II-B has the thermal characteristics of a high quality window system. Temperatures near the appliance will be cooler than what is realized with a fully insulated wall.

Operation of the appliance will eliminate any cool drafts and will provide the room with a comfortable ambiance.

CAUTION

Check building codes prior to installation.

- Installation **MUST** comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

When planning an appliance installation, it's necessary to determine the following information before installing:

- Where the appliance is to be installed. **See Section 3.**
- Gas supply piping. **See Section 6.**
- Electrical wiring. **See Section 7.**
- Framing and finishing details. **See Sections 3 and 8.**
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired. **See Section 9.**



WARNING

- Keep appliance dry.
- Mold or rust may cause odors.
 - Water may damage controls.



B. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Reciprocating saw	Framing material
Pliers	Hi temp caulking material
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Manometer	Voltmeter
Tape measure	Level
Non-corrosive leak check solution	
1/2 - 3/4 inch length, #6 or #8 Self-drilling screws	
One 1/4 inch female connection (for optional fan)	

C. Inspect Appliance and Components



WARNING

Inspect appliance and components for damage. Damaged parts may impair safe operation.



- Do NOT install damaged components.
 - Do NOT install incomplete components.
 - Do NOT install substitute components.
- Report damaged parts to dealer.

- Carefully remove the appliance and components from the packaging.
- Remove and keep outdoor flashing header from pallet by removing two fasteners.
- The gas logs may be packaged separately and must be field installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**



WARNING

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

3 Framing and Clearances

NOTE:

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

A. Selecting Appliance Location

When selecting a location for your appliance it is important to consider the required clearances to walls (see Figure 3.1).

⚠ WARNING

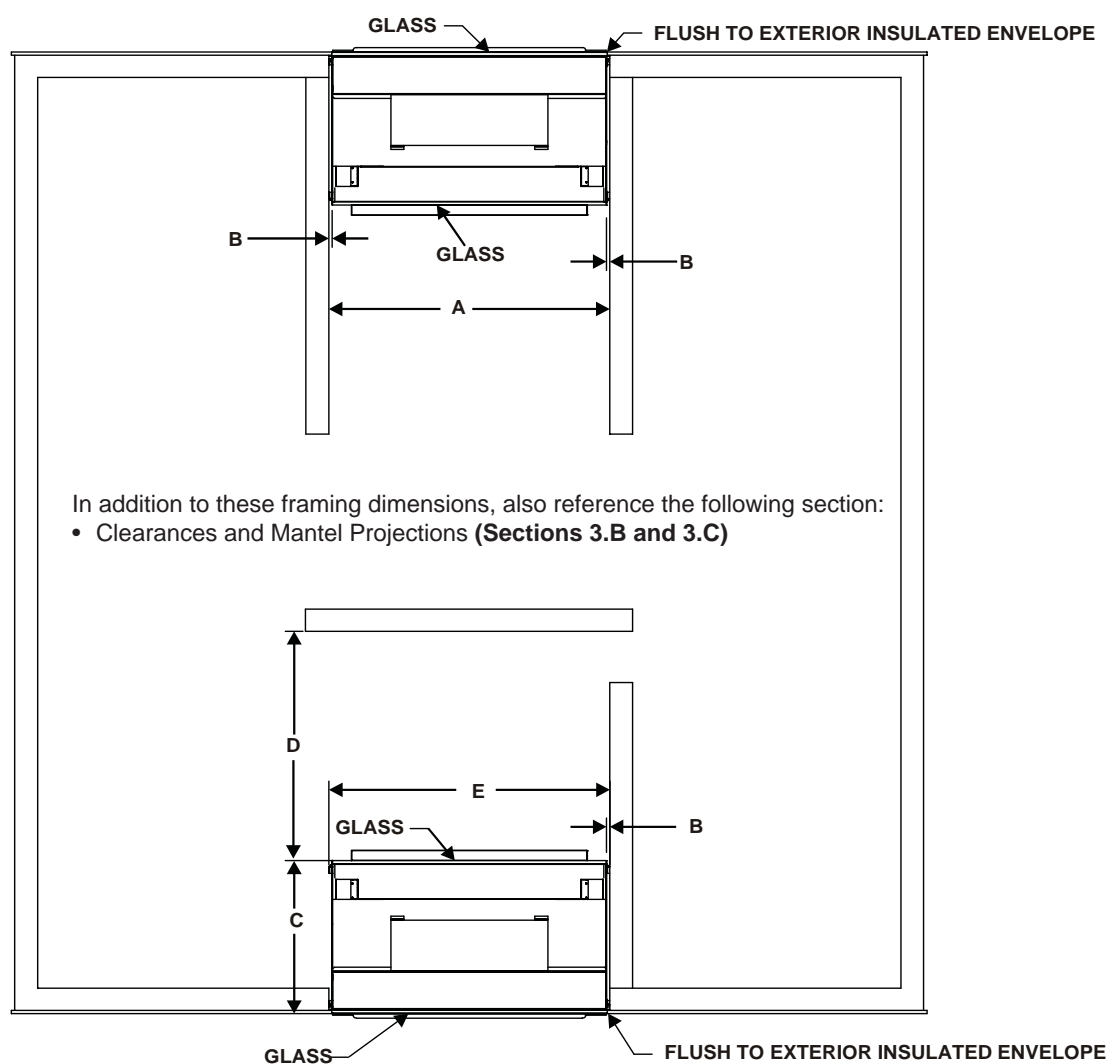


Fire Risk
Provide adequate clearance:

- Around air openings
- To combustibles
- For service access

 Locate appliance away from traffic areas.


NOTE: For actual appliance dimensions refer to Section 13.



	A	B	C	D	E
	<i>Minimum</i>	<i>Minimum</i>	-	<i>Minimum</i>	-
Inches	43	1/2	24	36	43
Millimeters	1092.2	12.7	609.6	914.4	1092.2

Figure 3.1 Appliance Locations

B. Clearances



⚠ WARNING

Fire Risk.
Odor Risk.

- Install appliance on hard metal or wood surfaces extending full width and depth of appliance.
- Do NOT install appliance directly on carpeting, vinyl, tile or any combustible material other than wood.



⚠ WARNING

Fire Risk.

Do not install appliance against vapor barriers or exposed insulation.

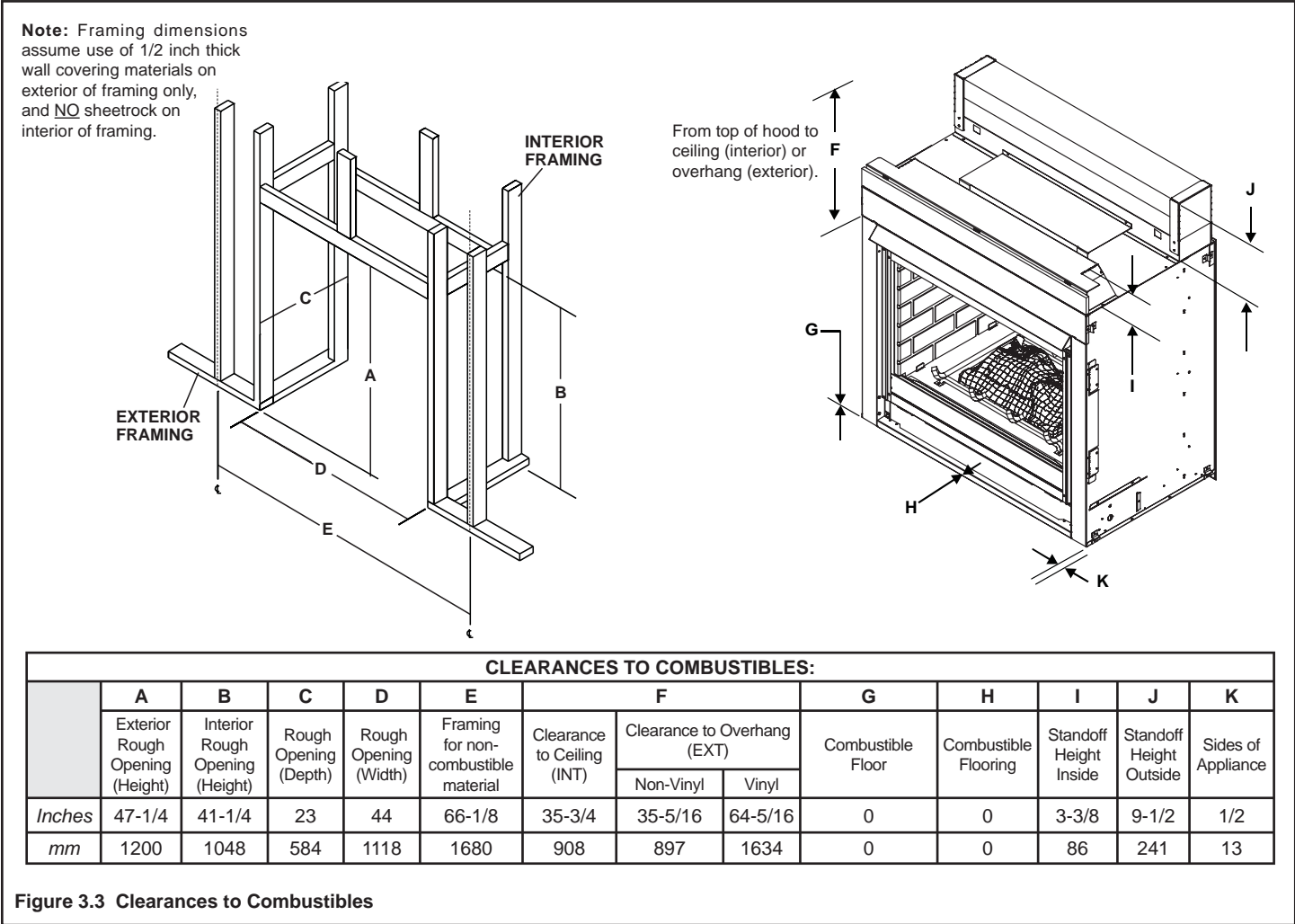
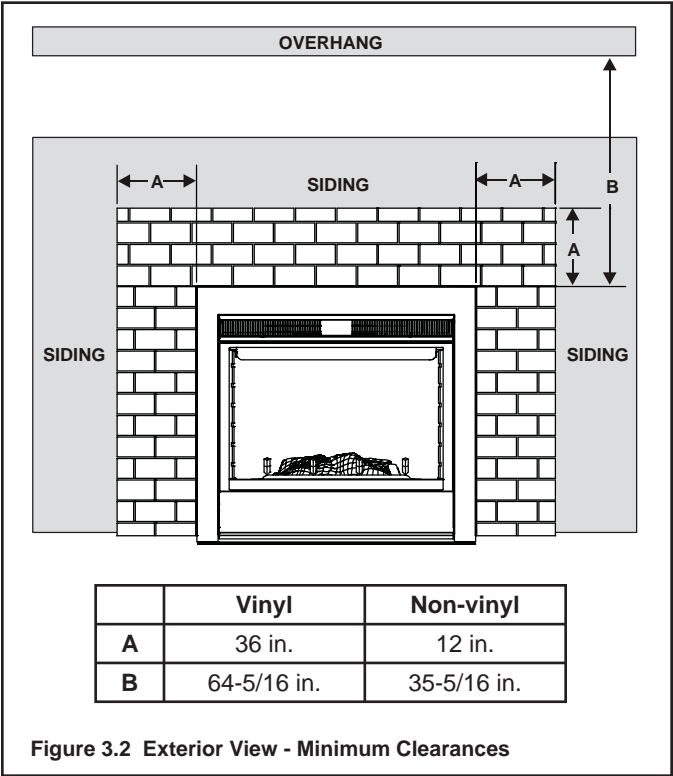
- Prevent contact with sagging or loose insulation.



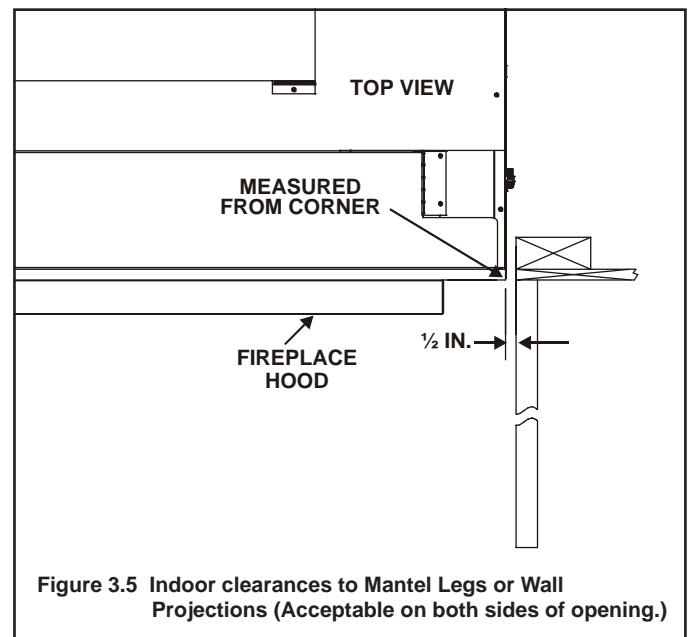
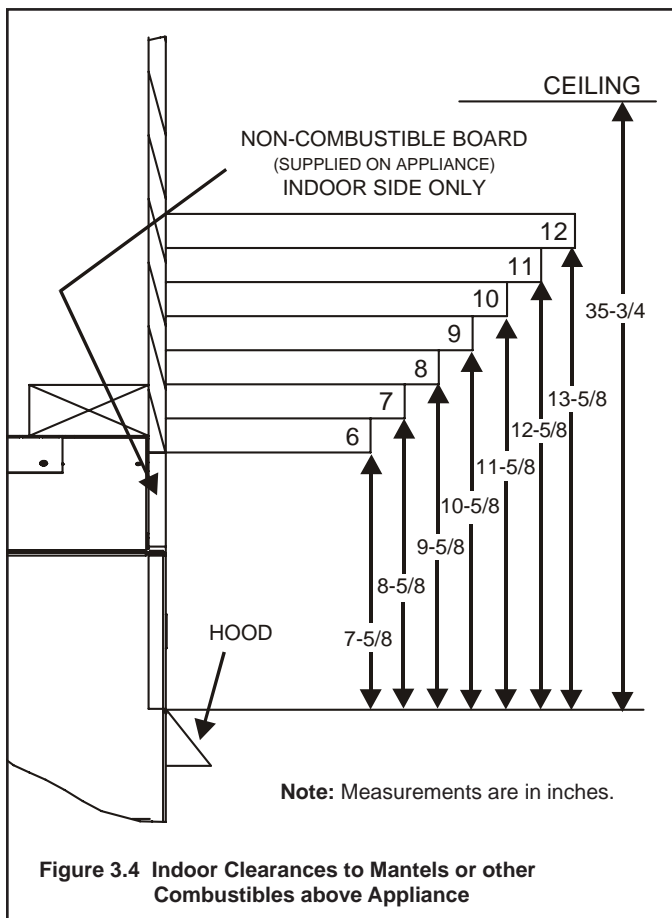
⚠ WARNING

Fire Risk.

- Locate and install appliance to all clearance specifications in manual.



C. Mantel Projections - Indoor only

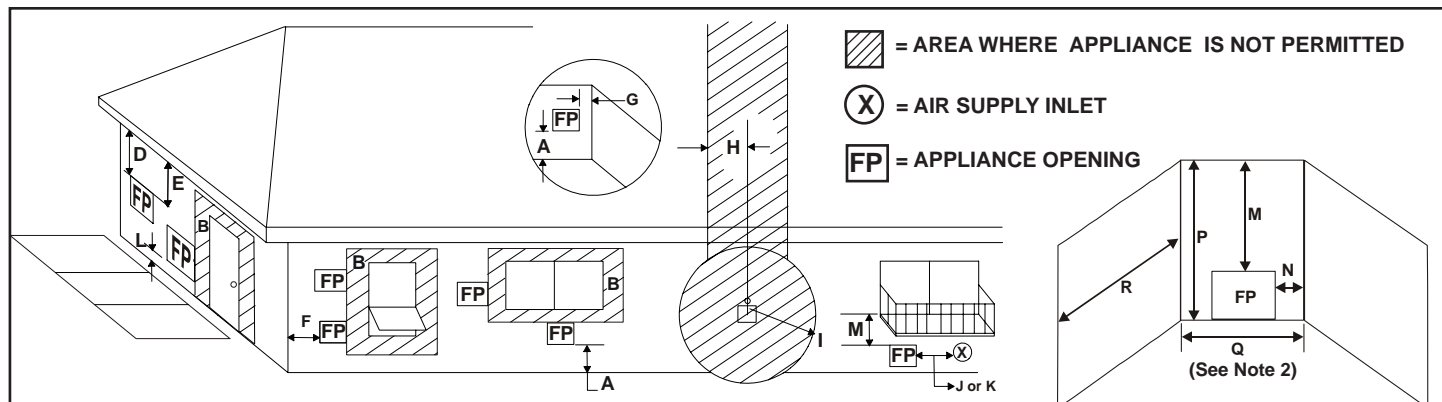


4 Termination Locations

A. Appliance Opening Minimum Clearances

WARNING

Fire Risk. Explosion Risk.
Maintain vent termination minimum clearances as specified.



- | | |
|--|---|
| <p>A = 0"clearances above grade, veranda, porch, deck or balcony
(See Note 1)</p> <p>B* = 12"clearances to window or door that may be opened, or to permanently closed window.</p> <p>D = 35-5/16" (non-vinyl)vertical clearance to ventilated soffit located above the hood within a horizontal distance of 2 feet (60 cm) from the center-line of the hood
64-5/16" (vinyl)</p> <p>E = 35-5/16" (non-vinyl)clearance to unventilated soffit
64-5/16" (vinyl)</p> <p>F = 9"clearance to outside corner</p> <p>G* = 12"clearance to inside corner</p> <p>H = 3 ft. (Canada)not to be installed above a gas meter/regulator assembly within 3 feet (90cm) horizontally from the center-line of the regulator</p> <p>I = 3 ft.clearance to service regulator vent outlet and electric service</p> | <p>J = 9" (U.S.A.)
12" (Canada)clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance</p> <p>K = 3 ft. (U.S.A.)
6 ft. (Canada)clearance to a mechanical air supply inlet</p> <p>L** = 54"clearance above paved sidewalk or a paved driveway located on public property
(See Note 1)</p> <p>M*** = 35-5/16"clearance under veranda, porch, deck, balcony or overhang
64-5/16"vinyl</p> <p>N = 12"non-vinyl siding
36"vinyl siding</p> <p>P = 8 ft.</p> |
|--|---|

	Q _{MIN}	R _{MAX}
Twilight-II-B	10 feet	2 x Q _{ACTUAL}
1 additional termination cap	Q + 3 feet	1 x Q _{ACTUAL}
2 additional termination caps	Q + 6 feet	2/3 x Q _{ACTUAL}
3 additional termination caps	Q + 9 feet	1/2 x Q _{ACTUAL}
R _{MAX} = (2 / # caps plus appliance) x Q _{ACTUAL}		

- * 36" minimum for vinyl windows or vinyl siding.
- ** a appliance shall not open directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- *** only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor, or if the screened porch guidelines are followed.

NOTE 1: Local codes or regulations may require different clearances.

NOTE 2: Termination in an alcove space (spaces open only on one side and with an overhang) are permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be 3 feet minimum between terminations or between the appliance and termination. 2. All mechanical air intakes within 10 feet of a termination must be a minimum of 3 feet below the appliance hood. 3. All gravity air intakes within 3 feet of the appliance hood must be a minimum of 1 foot below the termination.

Figure 4.1 Minimum Clearances for Appliance Opening

This appliance is approved for installation onto screened porches with the following guidelines:

- Minimum porch area: 96 square feet
- Minimum ceiling height: 92 inches
- Minimum two walls must be screened
- Minimum top of screen height, side walls: 6 ft. 8 in.
- Minimum screen area: 64 square feet

NOTE: There may be some odor and small amounts of soot associated with venting the Twilight-II-B onto a screened porch. Ensuring good cross draft ventilation and routine maintenance of the appliance will maximize comfort and cleanliness.

5 Appliance Preparation

A. Removing Non-combustible Facing Material Assembly

The non-combustible assembly is located on right-hand side of appliance (when looking from outdoor side of appliance).

CAUTION

- Handle with care.
- Non-combustible material may be damaged if dropped.

- Hold non-combustible pieces in place.
- Remove and save two screws from upper bracket.
- Remove non-combustible pieces.
- Remove and save three screws from lower bracket.
- Discard brackets.
- Replace screws in holes where brackets were attached to appliance.

CAUTION

- Handle with care.
- Avoid damaging protruding edges on outdoor side of appliance.

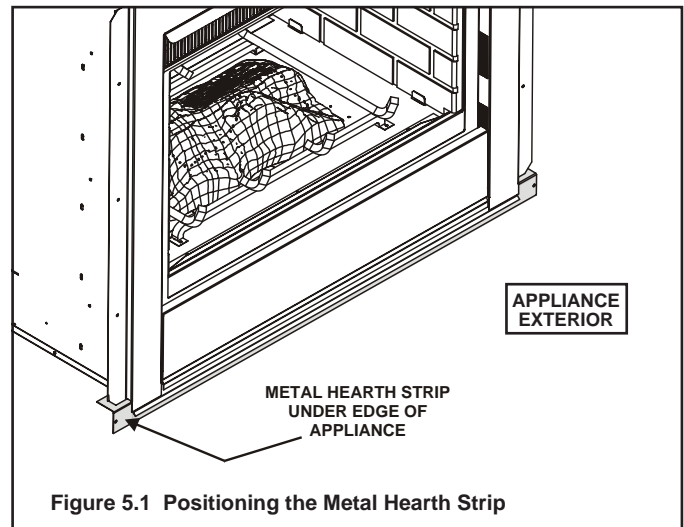


Figure 5.1 Positioning the Metal Hearth Strip

B. Securing and Leveling the Appliance

⚠ WARNING



- Fire Risk.
- Prevent contact with sagging, loose insulation.
 - Do NOT install against vapor barriers or exposed insulation.

Placing Metal Hearth Strip

The metal hearth strip (approx. 46 inches x 4 inches) is used to provide added protection where appliance and outer structure meet.

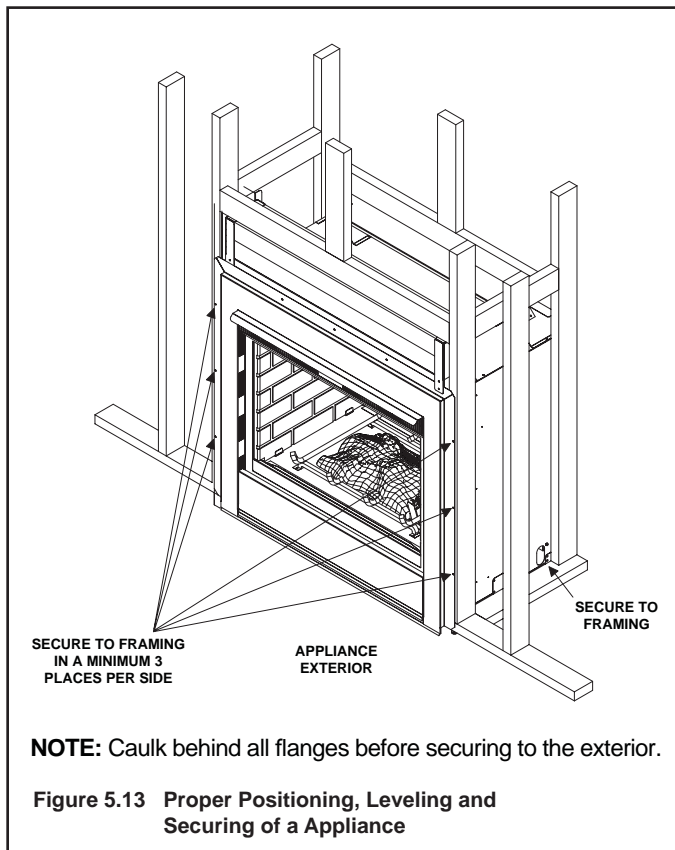
- Place a generous bead of silicone caulk into the corner of the protective hearth strip.
- Place the metal strip onto the structure where the outer edge of the appliance will sit (see Figure 5.1). It should overlap building paper to prevent water infiltration.

Placing and Securing Appliance

Place the appliance into position. Make sure flashing edges on the outdoor surround fit up tight to the framing.

The diagram shows how to properly position, level, and secure the appliance (see Figure 5.13). Nailing tabs are provided to secure the appliance to the framing members.

- Caulk behind flanges before securing to framing.
- Place the appliance into position.
- Level the appliance from side to side and front to back.
- • Shim the appliance as necessary. It is acceptable to use wood shims.
- Keep nailing tabs flush with the framing.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.

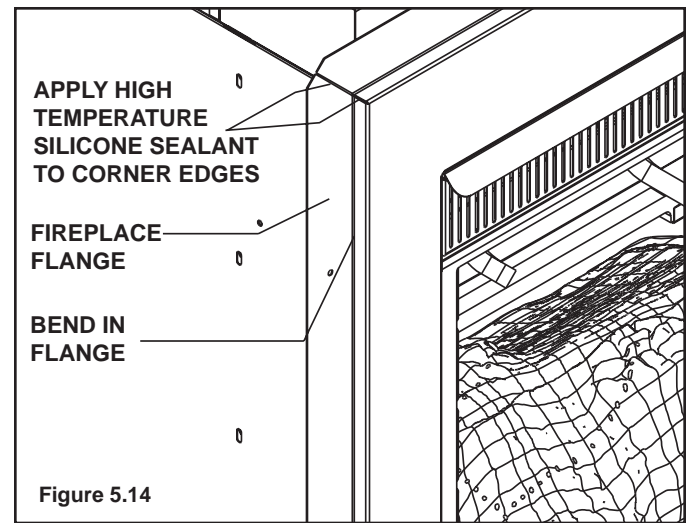


CAUTION

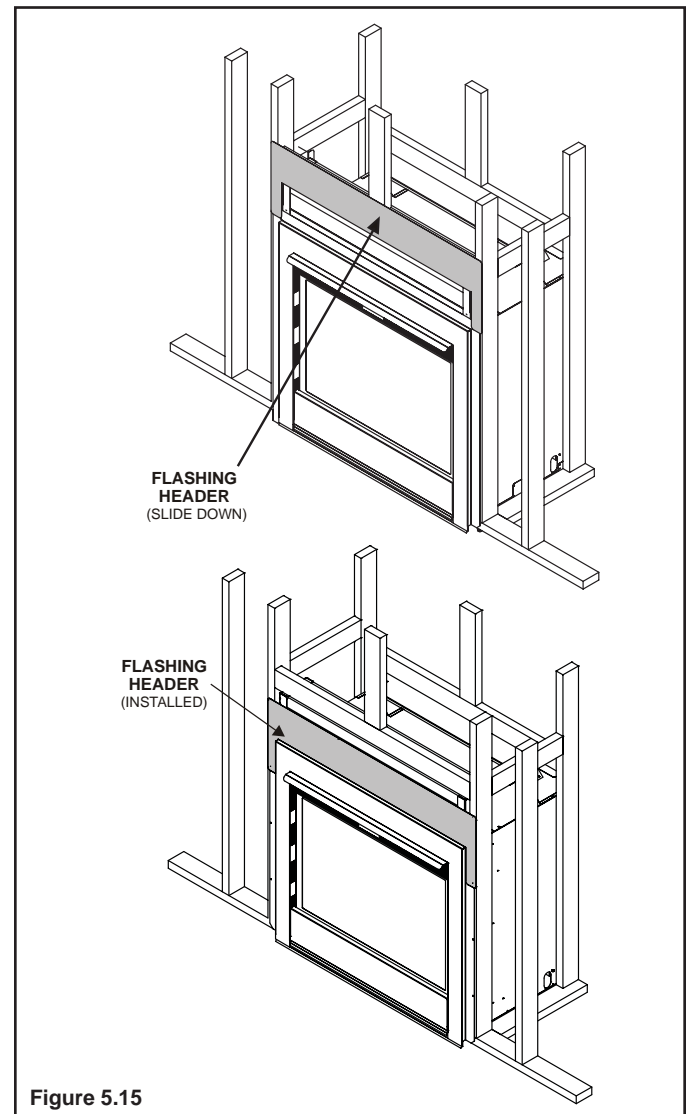
Do NOT notch into the framing around the appliance spacers.

Placing Flashing and Sheathing

Apply high temperature silicone sealant to corner edges ← of fireplace flange (see Figure 5.14).



Install outdoor flashing header (sheetmetal piece removed from shipping pallet). Place over upper portion of shroud flange. Line up holes on shroud sides (see Figure 5.15)

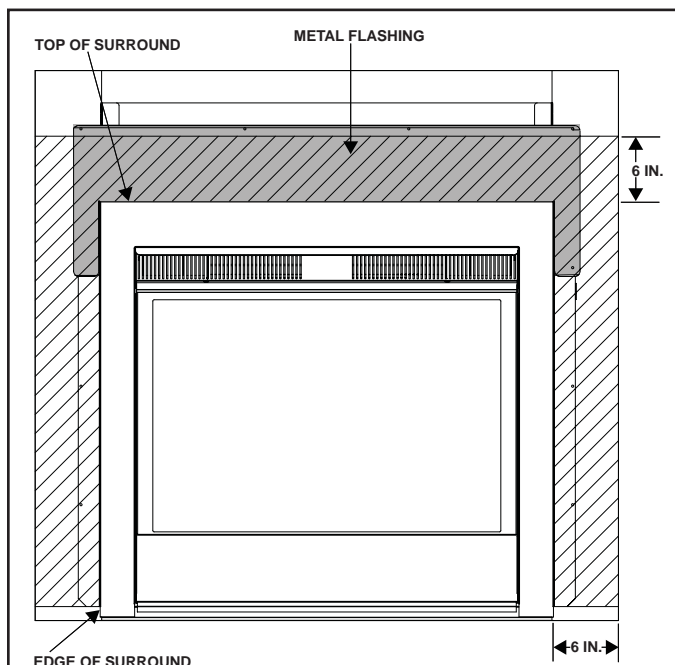


Seal flashing to exterior of building using hightemp caulk. Attach to building using holes provided on the top of the left and right sides of outdoor flashing (see Figure 5.15).

→ Apply housewrap or building paper

For placement of combustible housewrap or building paper and non-combustible sheathing for the outside wall see Figures 5.16 and 5.17.

Special care should be taken when choosing building materials for weather proofing (i.e. building wraps, sealant tapes, liquid sealants, rubberized flashings, etc.). All sealant materials or building wraps installed within 6 inches of the top and sides of the fireplace surround must be approved to a minimum temperature of 225° F continuous exposure. Consult the material's manufacturer to ensure product compliance.



→ Figure 5.16 Outside View without Non-combustible Sheathing Shown

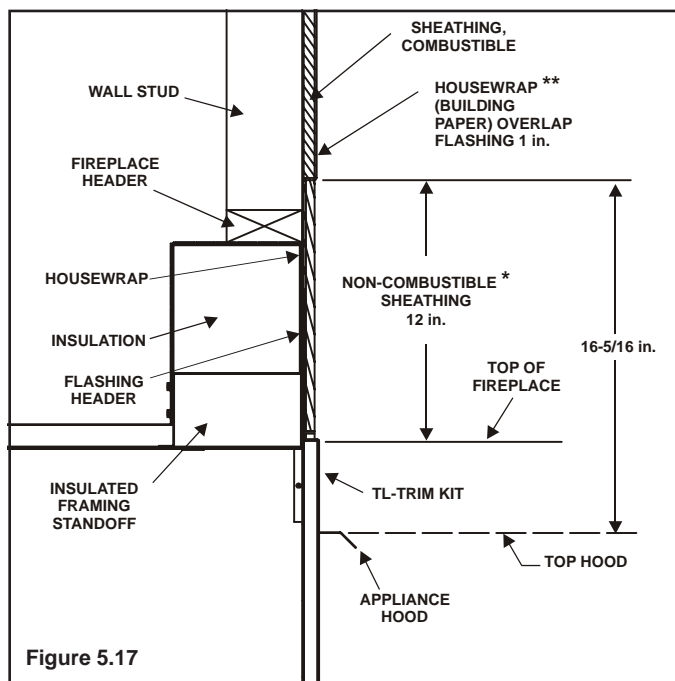


Figure 5.17

* **NOTE:** All finishing materials on top of exterior sheathing must be non-combustible for a minimum of 12 inches above and on both sides of the exterior face of the appliance. This non-combustible finishing material can be up to a maximum of 6 inches thick (6 inches maximum horizontal overhang) to allow for brick and stone alcoves (see Figure 8.5).

** **NOTE:** Combustible house wrap or building paper **MUST NOT** extend over the outside of non-combustible sheathing, and **MAY** extend over the flashing behind non-combustible sheathing. Use high temp silicone or sealant recommended by the manufacturer of the housewrap to seal between combustible sheathing house wrap and non-combustible sheathing. The sealant material used within 6 inches of the top and sides of the fireplace surround must be approved to a minimum temperature of 225° F continuous exposure.

Once the appliance is in place use enough high temperature silicone sealant or manufacturer specified sealant (approved to a minimum of 225° F) to make a water tight seal between outdoor surround and exterior sheathing.

Face the perimeter of the appliance with non-combustible sheathing over shroud flanges and flashing. See Figure 5.18 for non-combustible zone.

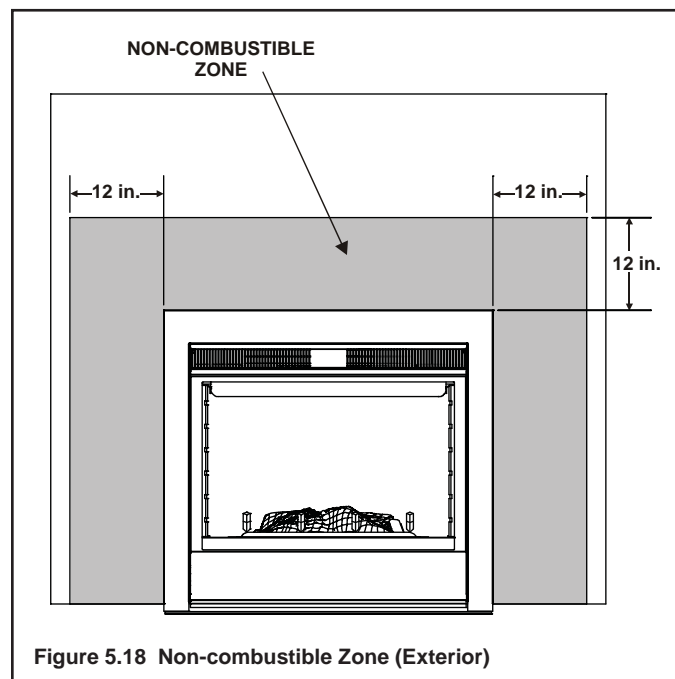


Figure 5.18 Non-combustible Zone (Exterior)

⚠ WARNING



Risk of Fire

- Non-combustible clearances must be maintained.
- Sheetrock, wood or other combustibles must NOT be used as sheathing or facing in the non-combustible zone.

- See **Sections 3 and 8** for proper clearances.
- See **Section 1** for combustible /non-combustible definitions.



C. Installing Non-combustible Facing Material (Outdoor Side)

WARNING



Fire Risk.

- Follow these instructions exactly.
- Facing materials must be installed properly to prevent fire.
- No materials may be substituted without authorization by Hearth & Home Technologies.

- Center and attach two top boards (the two shorter pieces) to the framing members. See Figure 5.19.
- Use fasteners from fastener packet (in manual bag) in shaded areas (see Figure 5.19).
- Use regular sheetrock screws in non-shaded areas.

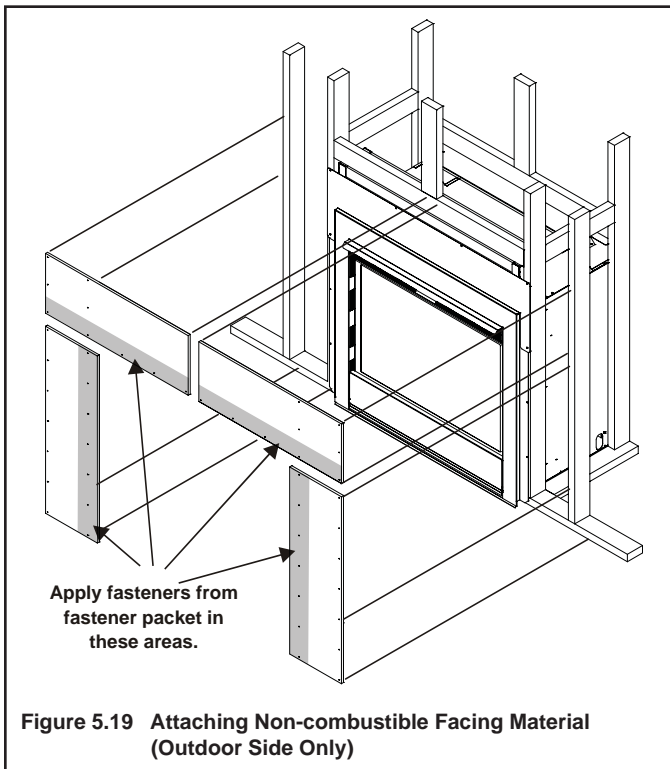
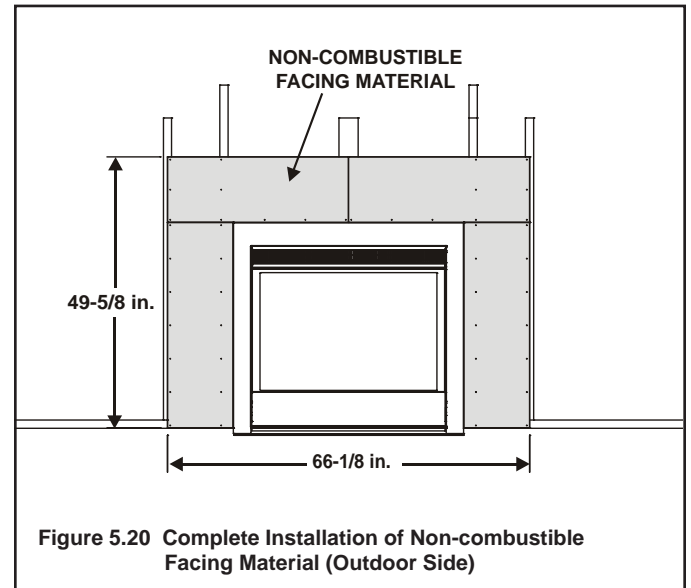


Figure 5.19 Attaching Non-combustible Facing Material (Outdoor Side Only)

- Attach the left and right side pieces to the framing members. (See Figure 5.20).



- Use a wet or dry towel or soft brush to remove dust or dirt from facing material.
- Apply a non-combustible adhesive to attach tile, stone or other non-combustible finishing materials per manufacturer's instructions.

6 Gas Information


A. Fuel Conversions


Before making gas connections ensure that appliance being installed is compatible with the available gas type.

Any natural or propane gas conversions necessary to meet the appliance and locality needs must be made by a qualified technician using Hearth & Home Technologies specified and listed gas conversion kit.

B. Gas Pressures


Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following NFPA51.


 **WARNING**



Fire Risk.
Explosion Hazard.
High pressure will damage valve.

- Disconnect gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.

 **WARNING**



Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating.

Install regulator upstream of valve if line pressure is greater than 1/2 psig.

Pressure requirements for appliance are shown in the table below. Minimum pressures must be met when other household gas appliances are operating.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.0 inches w.c.	11.0 inches w.c.
Maximum Inlet Gas Pressure	14.0 inches w.c.	14.0 inches w.c.
Manifold Pressure	3.5 inches w.c.	10.0 inches w.c.

C. Gas Connection


NOTE: Have the gas supply line installed in accordance with local building codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)


NOTE: A listed (and Commonwealth of Massachusetts approved) 1/2 inch (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 inch (13 mm) control valve inlet.

- If substituting for these components, please consult local codes for compliance.

Refer to Reference **Section 13** for location of gas line access in appliance.

NOTE: Gas line may be run from either side or the bottom of the appliance provided the hole in the outer wrap does NOT exceed 2-1/2 inches in diameter and does not penetrate the firebox.

 **WARNING**





Gas Leak Risk



- Support control when attaching pipe to prevent bending gas line.



NOTE: The gap between the supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible unfaced insulation to prevent cold air infiltration.

- Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 inch connection on the manual shutoff valve.

 WARNING	
	Fire or Explosion Hazard
	<ul style="list-style-type: none"> • Gas build-up during line purge may ignite. • Purge should be performed by qualified technician. • Ensure adequate ventilation. • Ensure there are no ignition sources such as sparks or open flames.

- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

 WARNING	
	CHECK FOR GAS LEAKS
	<p>Explosion Risk Fire Risk Asphyxiation Risk</p> <ul style="list-style-type: none"> • Check all fittings and connections. • Do not use open flame. • After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially-available, non-corrosive leak check solution. Be sure to rinse off all leak check solution following testing. <p>Fittings and connections may have loosened during shipping and handling.</p>

 WARNING	
	Fire hazard.
	<p>Do NOT change the valve settings.</p> <ul style="list-style-type: none"> • This valve has been preset at the factory. • Changing valve settings may result in fire hazard or bodily injury.

HIGH ALTITUDE INSTALLATIONS

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 feet, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4500 feet (in Canada), check with local authorities.

7 Electrical Information

A. Recommendation for Wire

This appliance requires 110-120 VAC be wired to the junction box for proper operation of the appliance.

CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.



CAUTION

Shock hazard.

- Replace damaged wire with type 105° C rated wire.
- Wire must have high temperature insulation.

NOTE: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code, CSA C221.1**.

NOTE: Waterproof insulated wire should be used when wiring the junction box.

B. Connecting to the Appliance



WARNING

Wire 110V to electrical junction box.

Do NOT wire 110V to valve.

Do NOT wire 110V to wall switch.

- Incorrect wiring will damage millivolt valves.
- Incorrect wiring will override IPI safety lockout and may cause explosion.



- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.
- If using thermostat use one compatible with a millivolt gas valve system.
- Follow parameters for locating thermostat (see individual thermostat instructions) to ensure proper operation of appliance.
- Keep wire lengths short as possible by removing any excess wire length.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

C. Optional Accessories

Optional fan and remote control kits require that 110-120 VAC be wired to the factory installed junction box before the appliance is permanently installed (see Figure 7.1).

Fan Installation

To provide best airflow, we recommend positioning fan on the left side (as viewed from appliance interior side - see Figure 7.2). **NOTE:** It is recommended fan be installed prior to gas line installation.

Wall Switch

Position the wall switch in the desired position on a wall. Run a maximum of 25 feet (7.8 m) or less length of 18 A.W.G. minimum wire and connect it to the appliance ON/OFF switch pigtails.

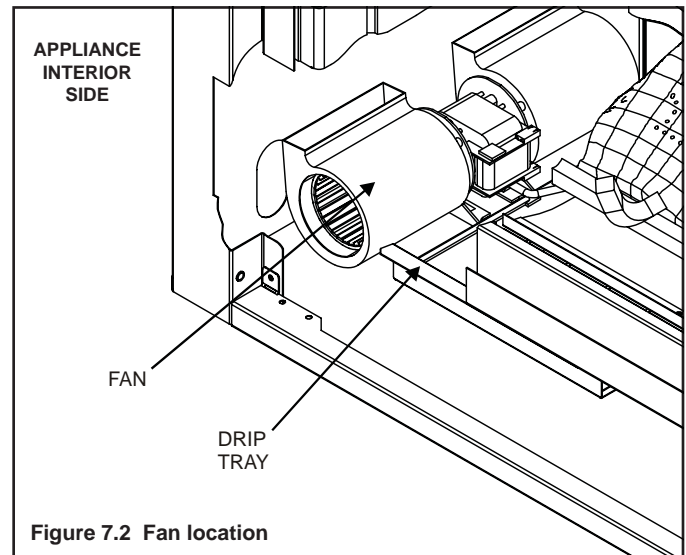


Figure 7.2 Fan location

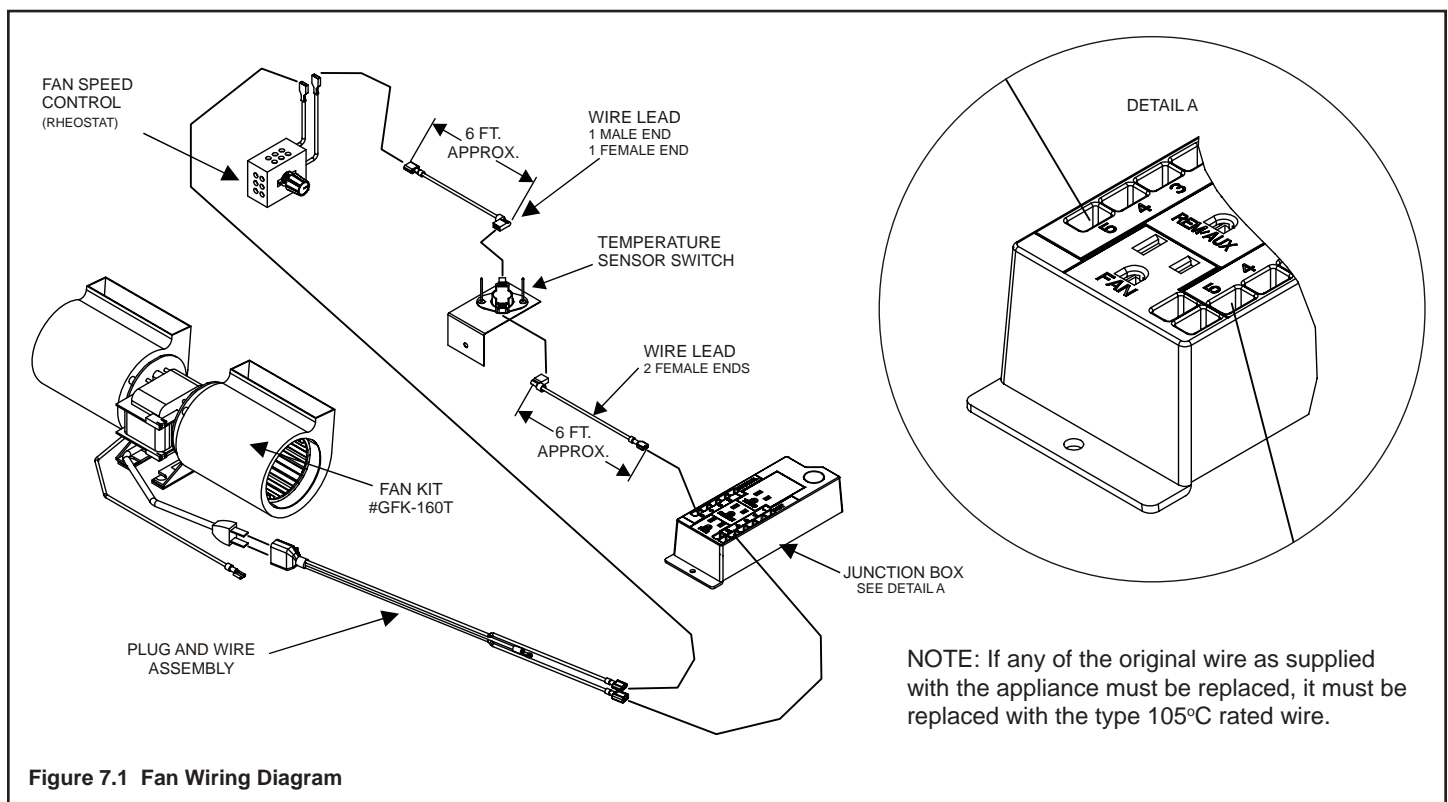


Figure 7.1 Fan Wiring Diagram

D. Intellifire Ignition System Wiring

This appliance requires a 110 VAC supply to the appliance junction box for operation. When using the transformer, the junction box must have uninterrupted 120V. A wiring diagram is shown in Figure 7.3.

This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.

This appliance is supplied with a battery pack and a 3 volt AC transformer, which requires the installation of the supplied junction box. It is highly recommended that the junction box be installed at this time to avoid reconstruction.

The battery pack requires two D cell batteries (not included).

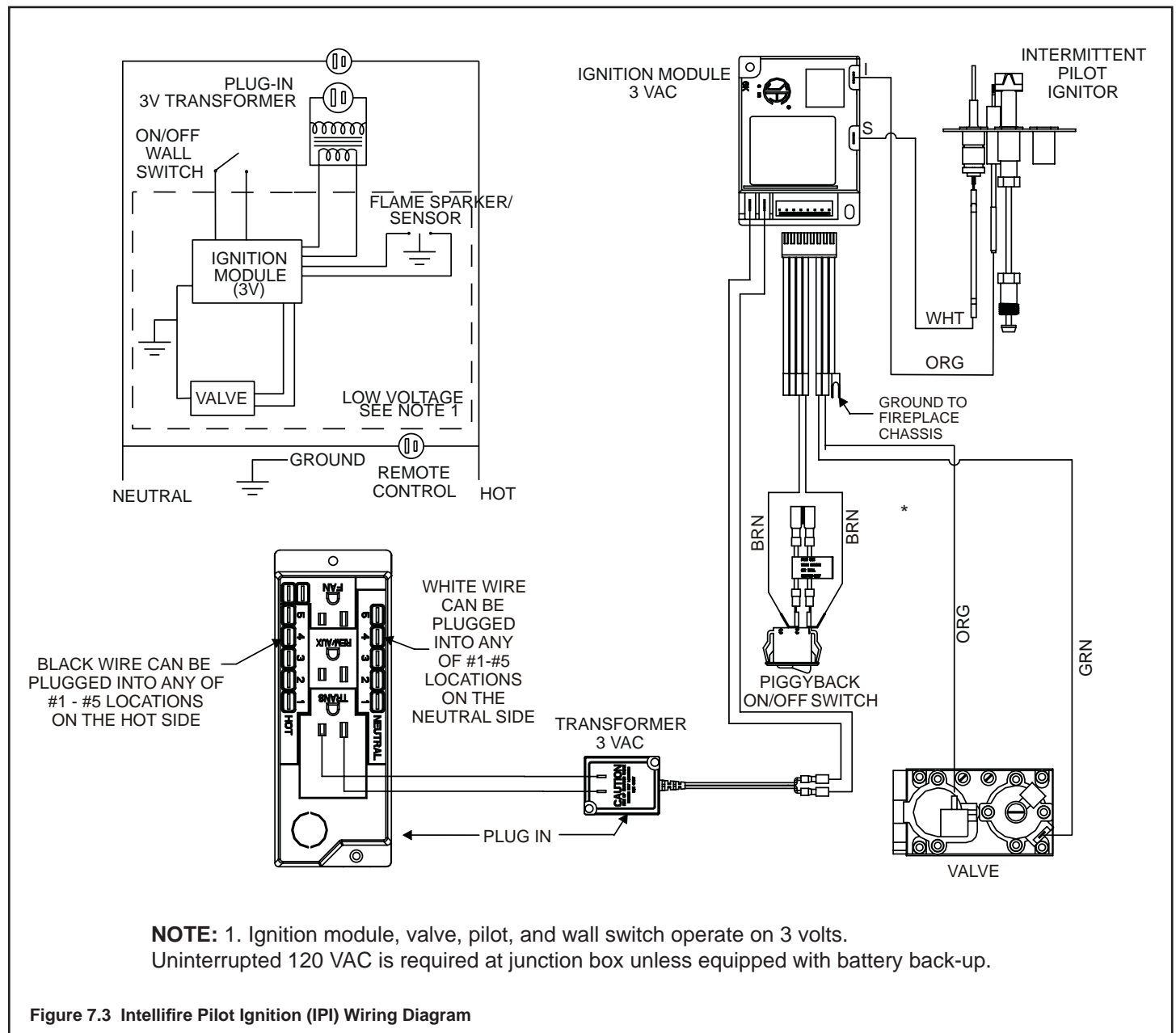
NOTE: Batteries cannot be placed in the battery pack while using the 3 volt AC transformer. The transformer must be unplugged if the battery pack is used or battery life will be reduced.

CAUTION

Battery polarity must be correct or module damage will occur.

Optional Accessories Requirements

Wiring for optional accessories should be done now to avoid reconstruction.



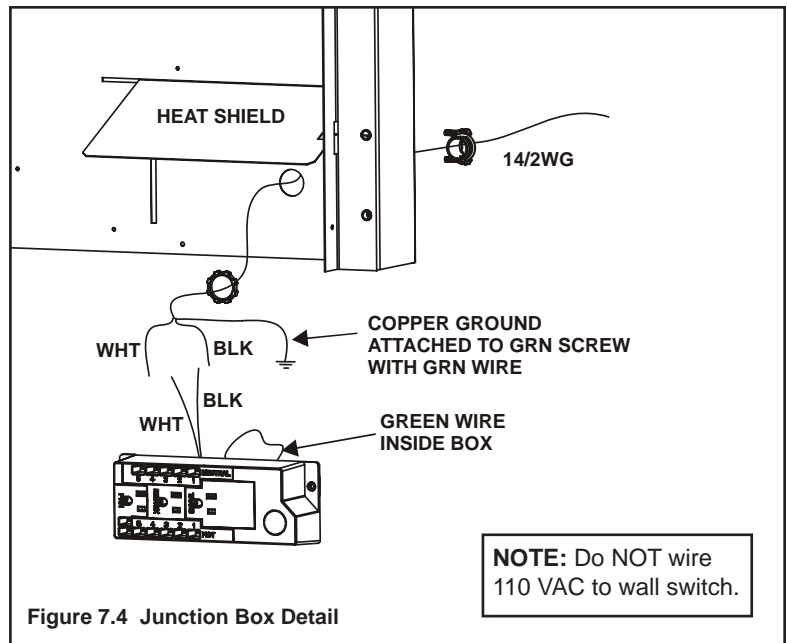
E. Junction Box Installation

If the box is being wired from the **OUTSIDE** of the appliance:

- Install the Romex™ connector (not included with appliance) in the side wrap.
- Loosen two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
- Make all necessary wire connections.

If the box is being wired from the **INSIDE** of the appliance:

- Remove the screw attaching the junction box to the outer shell, rotate the junction box inward to disengage it from the outer shell (see Figure 7.4).
- Pull the electrical wires from outside the appliance through this opening into the valve compartment.

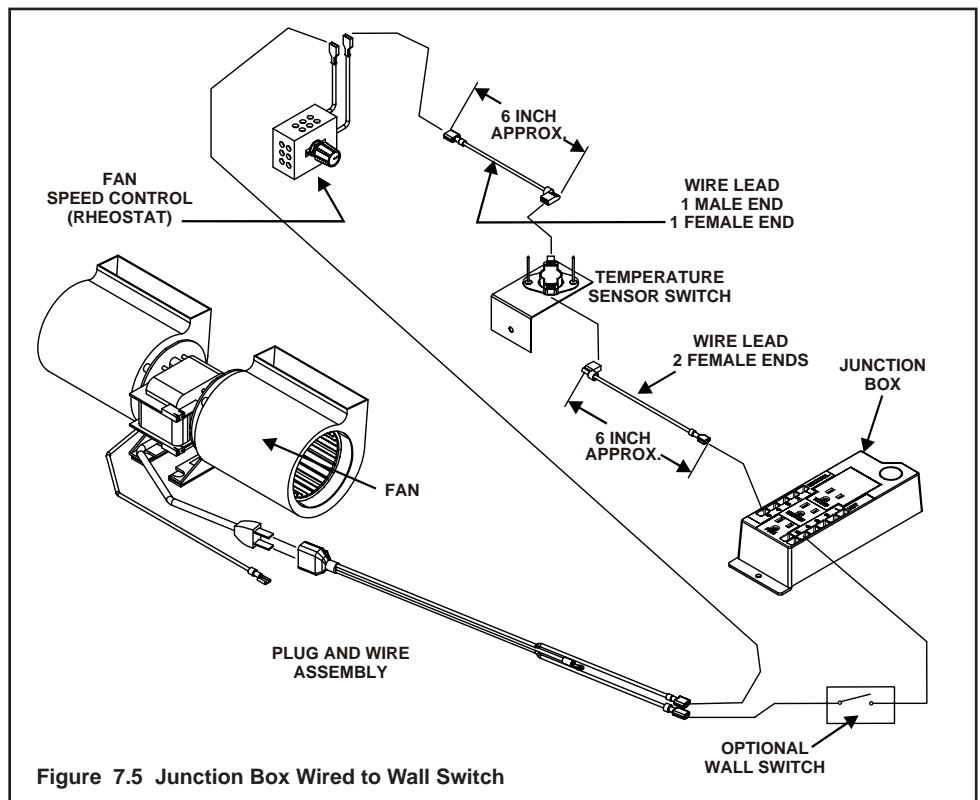


- Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
- Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.

F. Wall Switch Installation for Fan (Optional)

If the box is being wired to a wall mounted switch for use with a fan (See Figure 7.5):

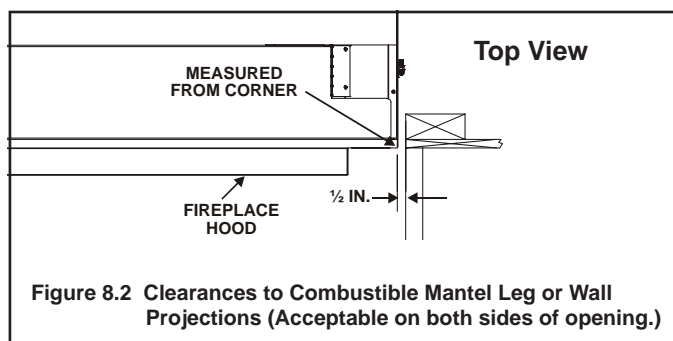
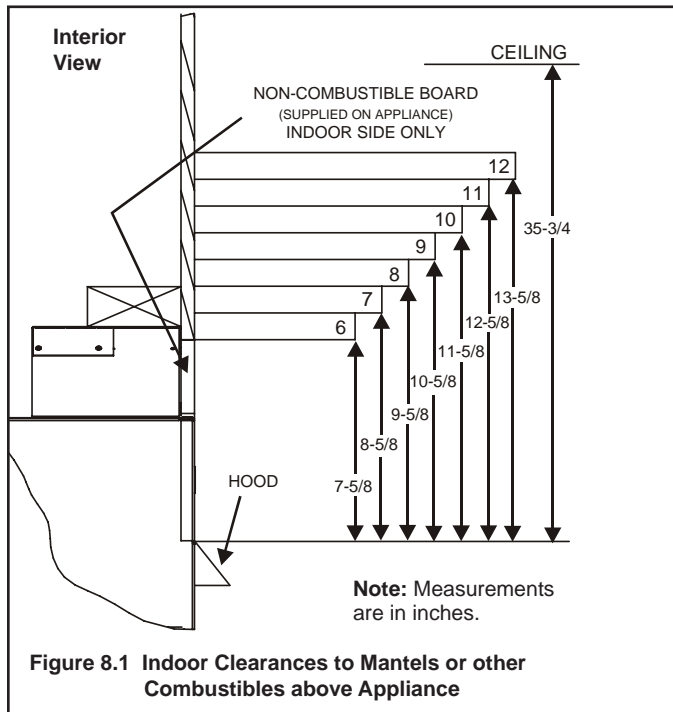
- The power supply for the appliance must be brought into a switch box.
- The power can then be supplied from the switch box to the appliance using a minimum of 14-3 with ground wire.
- At the switch box connect the black (hot) wire and red (switch leg) wire to the wall switch as shown.
- At the appliance connect the black (hot), white (neutral) and green (ground) wires to the junction box as shown.
- Add a 1/4 inch insulated female connector to the red (switch leg) wire, route it through the knockout in the face of the junction box, and connect to the top fan switch connector (1/4 inch male) as shown.



8 Finishing

A. Mantel Projections

Figure 8.1 shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.



B. Facing Material

⚠ WARNING



Fire Risk.

Do NOT obstruct air inlet or outlet grilles.

Do NOT modify grilles.

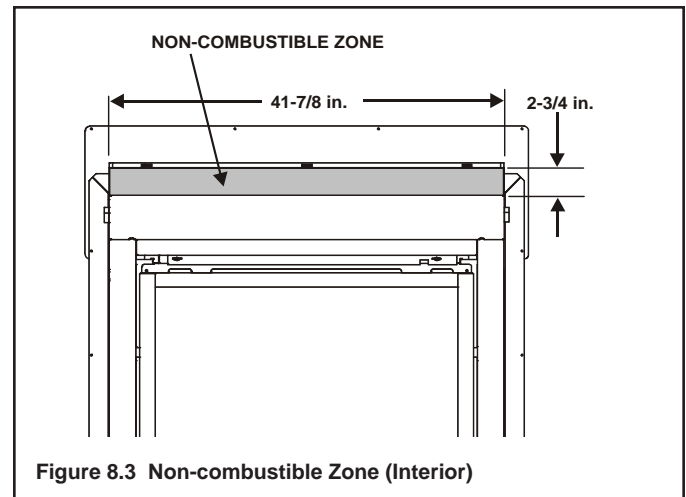
- Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:

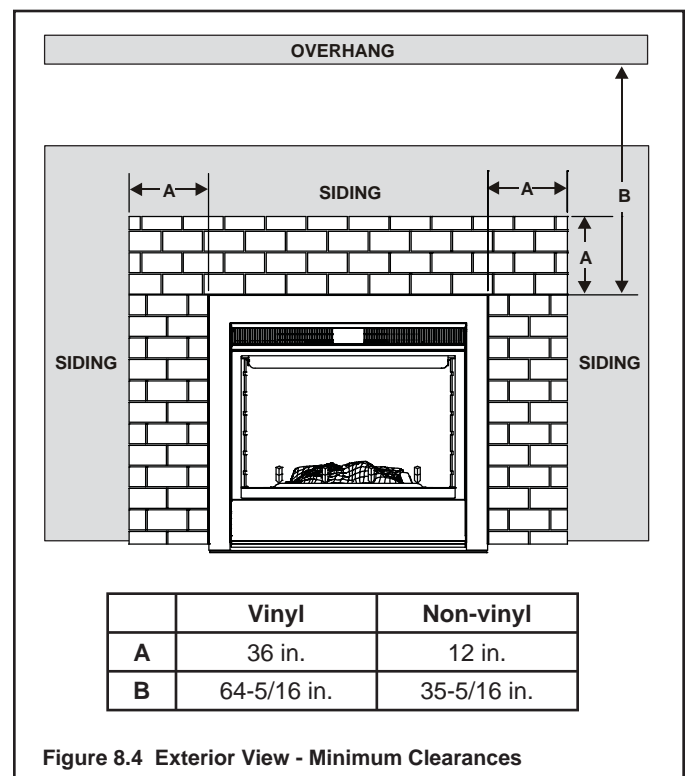
- Air flow through grilles or louvers.
- Operation of louvers or doors.
- Access for service.


Inside Facing Material


- May install combustible materials up to specified clearances on top, front and sides of appliance.
- Seal joints between finished wall and appliance top and sides with 300° F (140° C) minimum sealant.
- Leave space so bottom grille can be lowered for trim door removal.



Outside Facing Material









WARNING

Risk of Fire

- Non-combustible clearances must be maintained.
- Sheetrock, wood or other combustibles must NOT be used as sheathing or facing in the non-combustible zone.
- See **Sections 3 & 8** for proper clearances.
- See **Section 1** for combustible/non-combustible definitions.







WARNING


Fire Risk.


Finish all edges and fronts to clearances and specifications listed in manual.

- Black metal columns may be covered with non-combustible material only.
- Do NOT overlap combustible materials onto appliance front.
- Install combustible materials only up to specified clearances on top, front and side edges.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.

May install non-combustible materials to cover gap between facing material and appliance (see Figure 8.5).




WARNING



Fire Risk.

Water Intrusion Risk.

Hood is required.

- Flashing and non-combustible sheathing must be installed before facing materials.
- Facing must be non-combustible and seal tight to fireplace front.

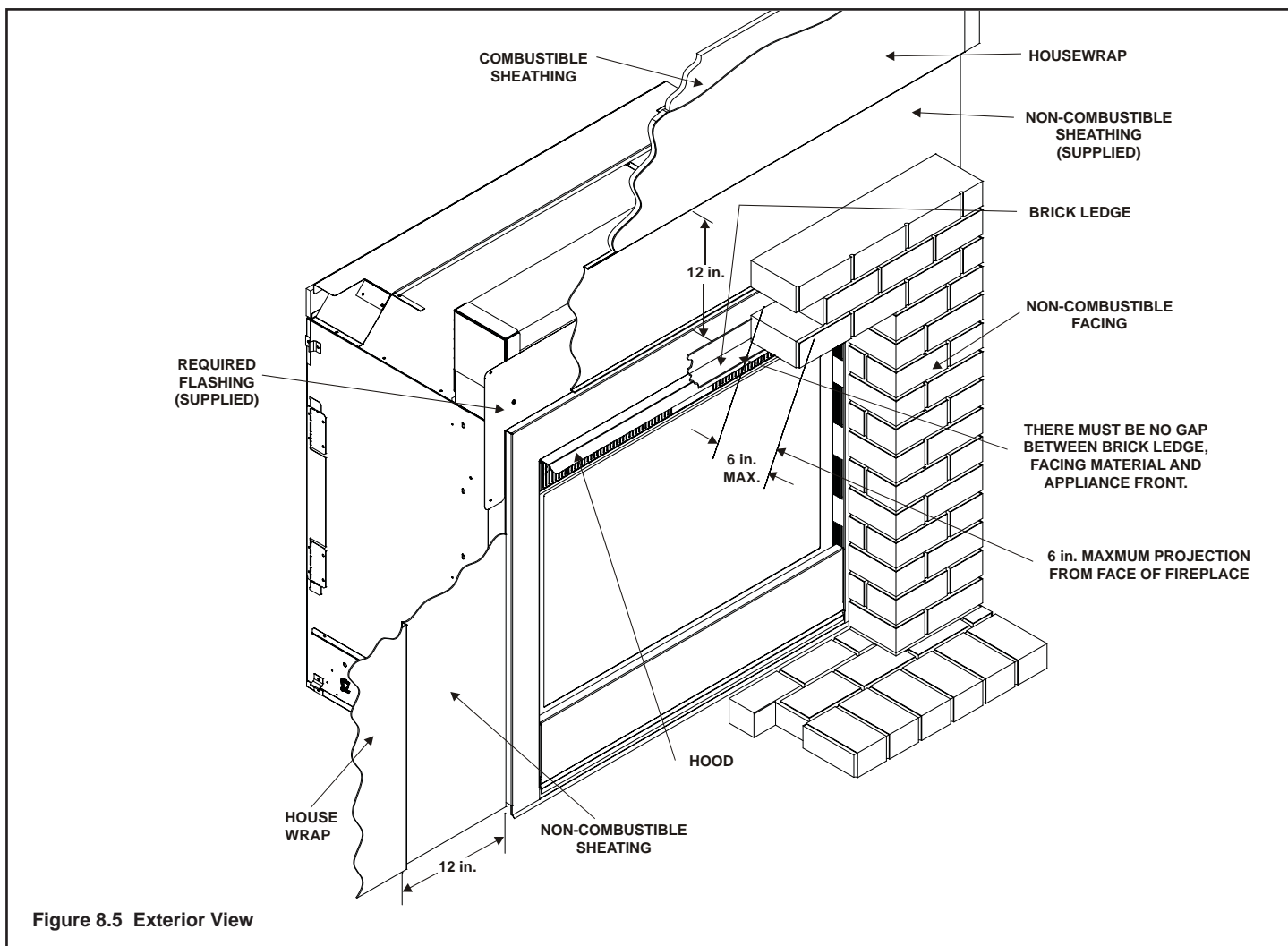


Figure 8.5 Exterior View

NOTE: All finishing materials on top of exterior sheathing must be non-combustible for a minimum of 12 inches above and on both sides of the exterior face of the appliance. This non-combustible finishing material can be up to a maximum of 6 inches thick (6 inches maximum horizontal overhang) to allow for brick and stone alcoves (see Figure 8.5).

NOTE: Combustible housewrap or building paper **MUST NOT** extend over the outside of non-combustible sheathing, and **MAY** extend over the flashing header behind non-combustible sheathing. Use hightemp caulk to seal between combustible sheathing housewrap and non-combustible sheathing.

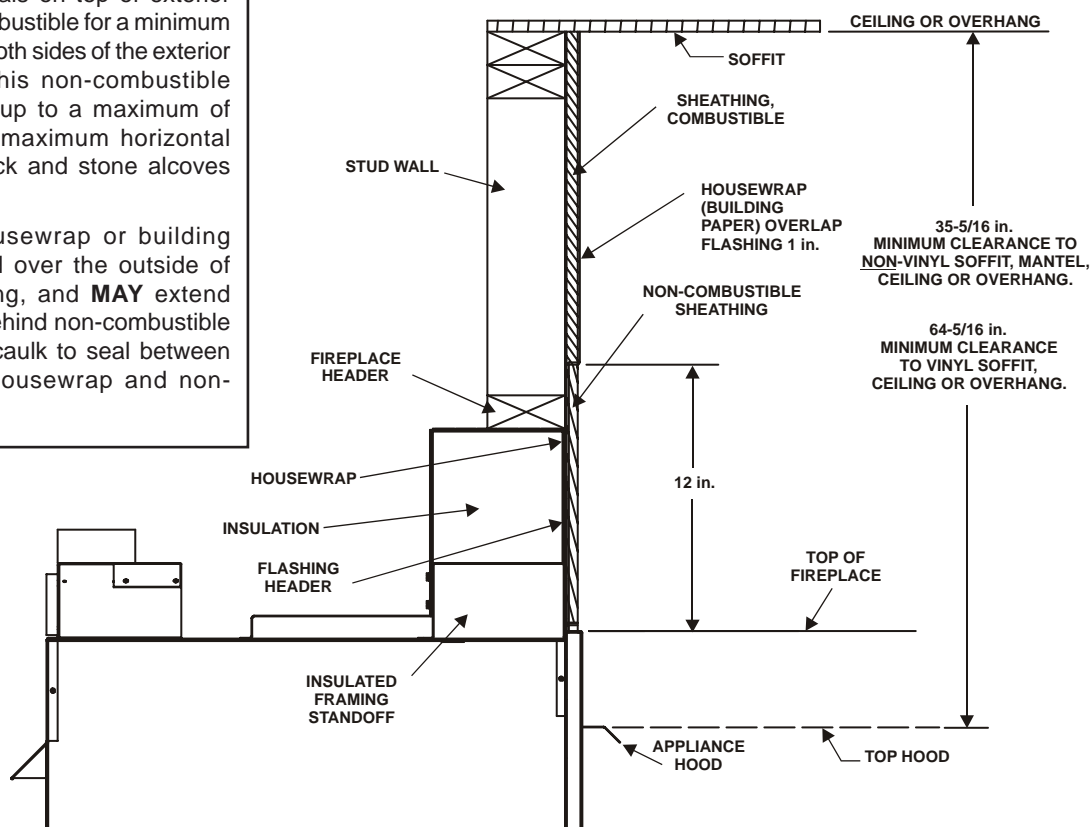


Figure 8.6 Exterior View

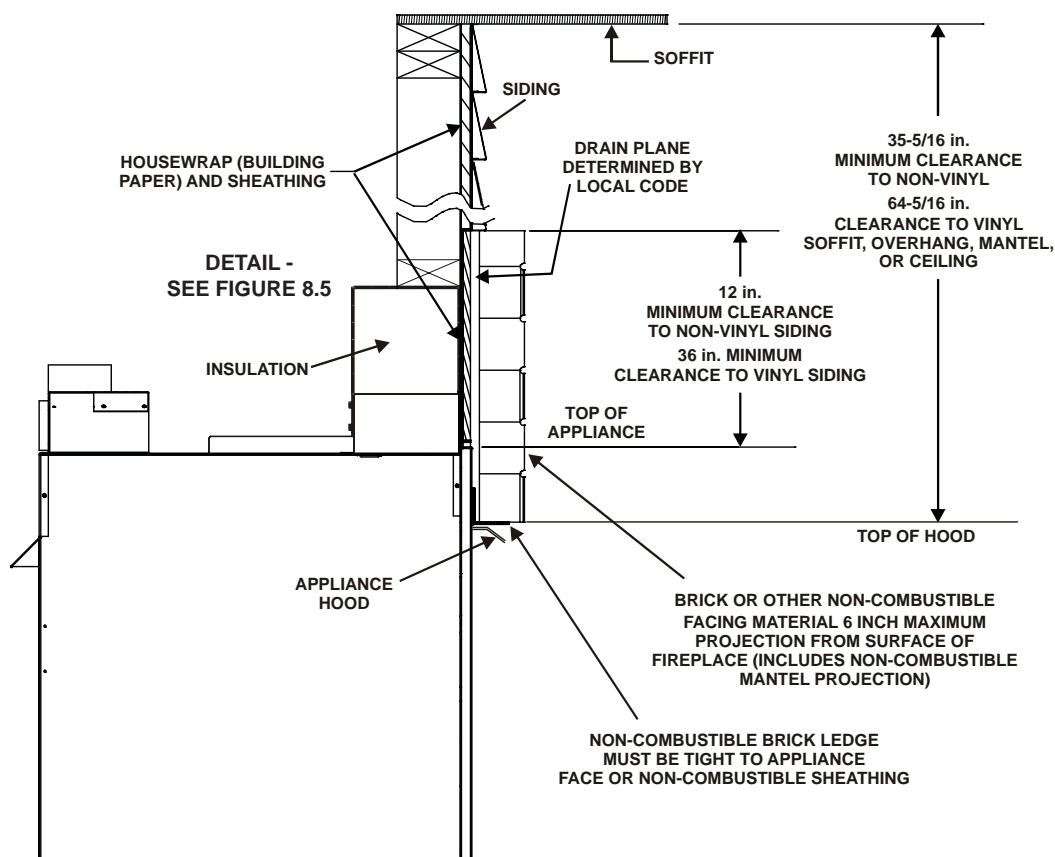


Figure 8.7 Exterior View with Non-combustible Facing Material

9 Appliance Setup

A. Remove Shipping Materials

Remove shipping materials from inside or underneath the firebox.

B. Clean the Appliance


Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

C. Accessories

Install approved accessories per instructions included with accessories. See Service Parts List for appropriate accessories. Refer to **Section 13**.

	⚠ WARNING Shock or fire risk. Use ONLY optional accessories approved for this appliance. <ul style="list-style-type: none">• Using non-listed accessories voids warranty.• Using non-listed accessories may result in a safety hazard.• Only Hearth & Home Technologies approved accessories may be used safely.
	

D. Lava Rock and Ember Placement

⚠ WARNING	
	Explosion Risk. <ul style="list-style-type: none">• Follow ember placement instructions in manual.• Do NOT place embers directly over burner ports.• Replace ember material annually. <p>Improperly placed embers interferes with proper burner operation.</p>

Placing Lava Rock

Place lava rock on refractory support pan. Cover entire support pan surface (see Figure 9.1).



Figure 9.1 Placement of Lava Rock

Placing the Ember Material

Ember material is shipped with this gas appliance. To place the ember material:

- Embers **CANNOT** be placed directly over ports.
- When placing Glowing Embers® onto the burner care should be taken so that the ports are not covered. Place the dime-size ember pieces just in front of the port trail, but not on or in between the ports (see Figure 9.2). Failure to follow this procedure will likely cause lighting and sooting problems.

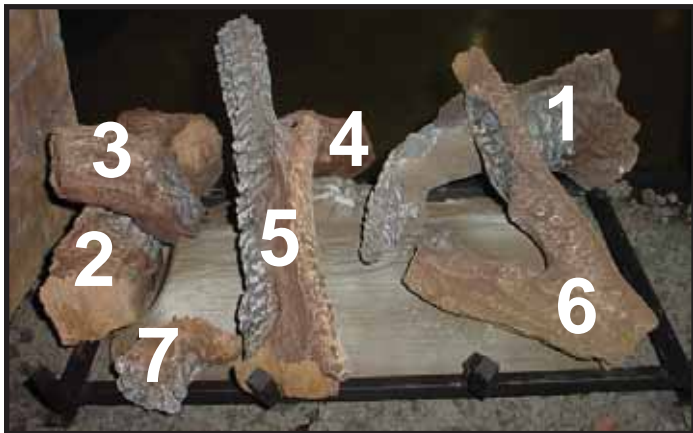


Figure 9.2 Placement of Ember Materials

- Save the remaining ember materials for use during appliance servicing. The embers provided should be enough for 3 to 5 applications.

E. Positioning the Logs

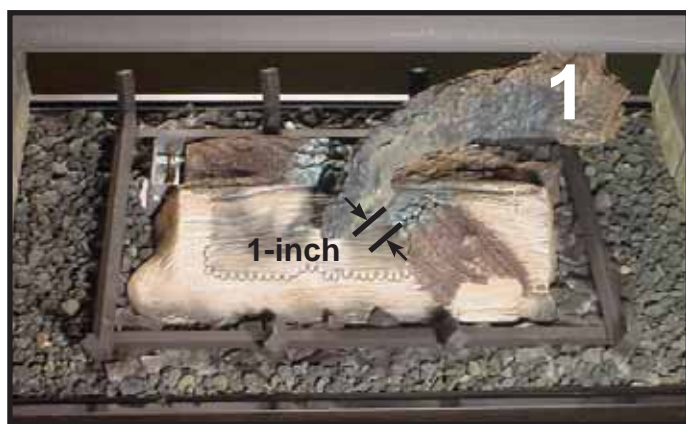
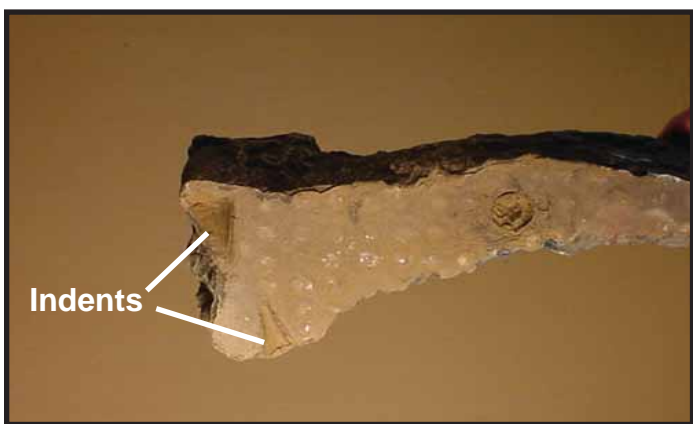
Log Set Assembly: LOGS-TWI



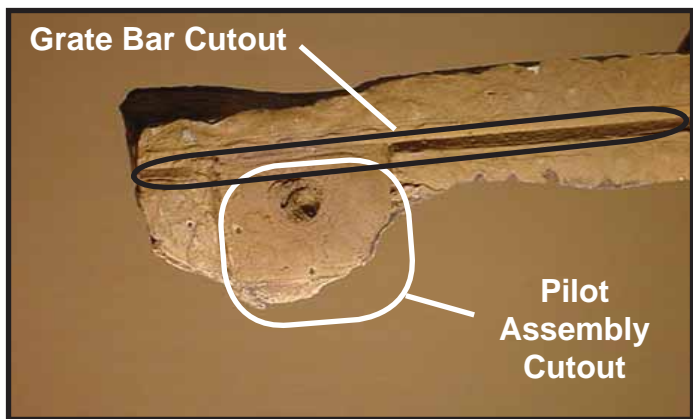
CAUTION: Logs are fragile! Carefully remove the logs from the packaging. Remove the metal supports which held the log box in place during shipping.



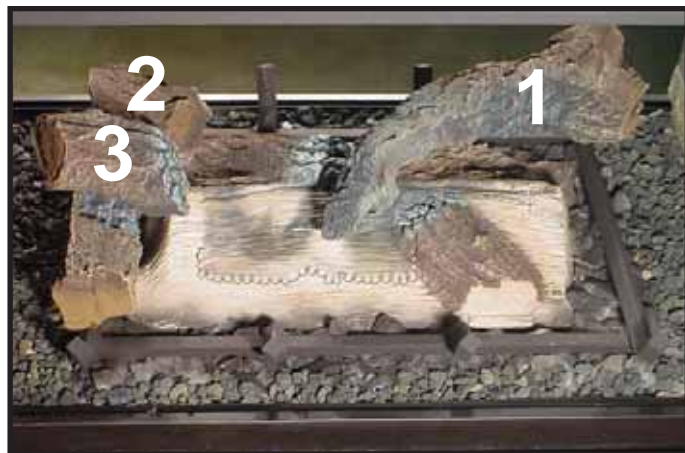
STEP 1. Before positioning the logs, refer to the installation manual for electric ember setup and ember placement.



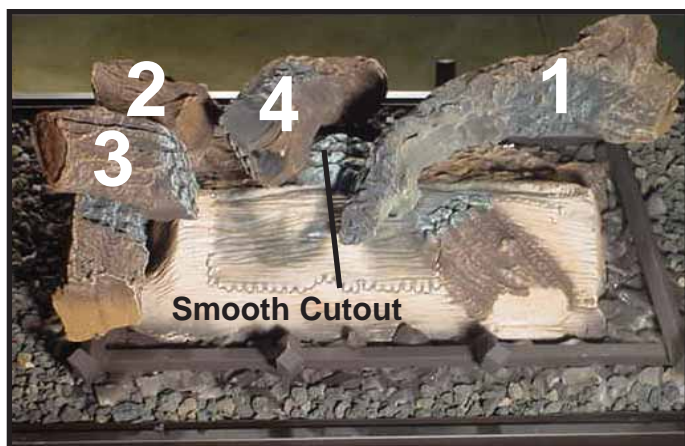
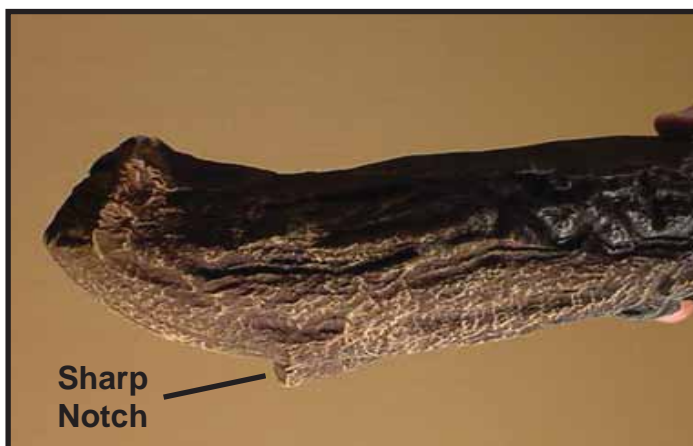
STEP 2. LOG #1 (SRV2005-701): Use the indents on the bottom side of the log to position the large end of the log onto the grate tine as shown. Position the thin end of log #1 one inch from port pattern as shown.



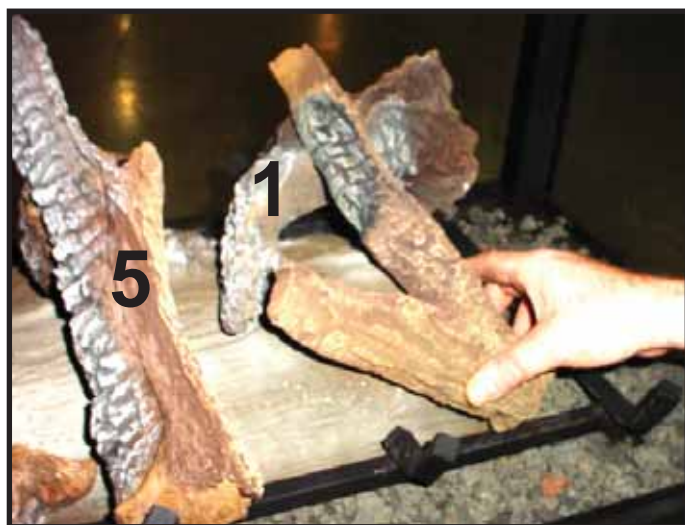
STEP 3. LOG #2 (SRV2005-700): Position log #2 on the left grate bar and the pilot assembly. Use the cut out notches on the log to position it as shown.



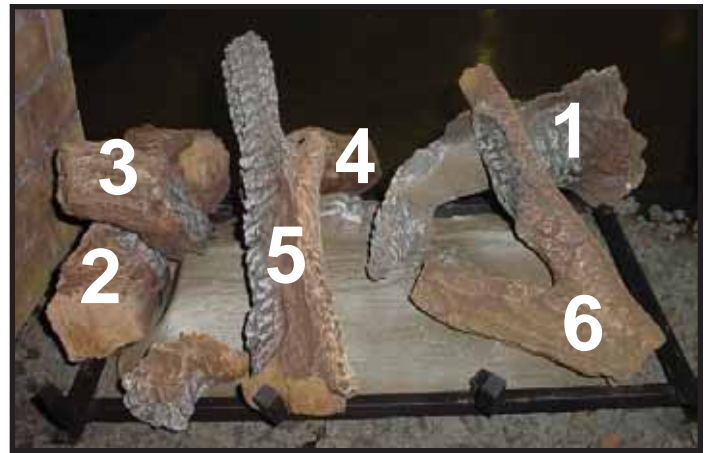
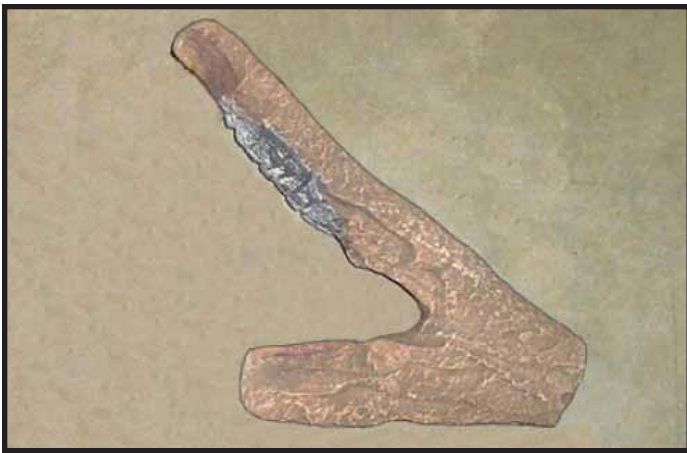
STEP 4. LOG #3 (SRV2005-702): Position log #3 as shown by leaning it against log #2 and resting the other end on the peak of the burner. Do not cover any port holes.



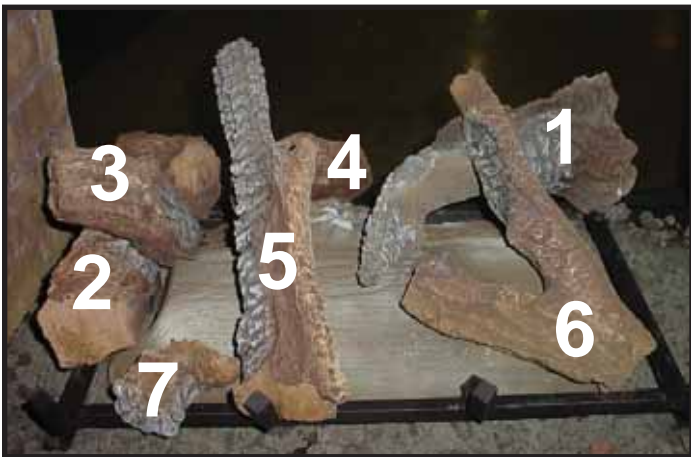
STEP 5. LOG #4 (SRV2005-703): Locate the sharp notch on log #4 against the grate tine as shown. The smooth cutout on log #4 should rest on the burner surface. As with log #3, be careful not to cover any port holes.



STEP 6. LOG #5 (SRV2005-704): Using the sharp notch on the heavy end of log #5, align it on the grate tine and on log #4 as shown.



STEP 7. LOG #6 (SRV2077-701): Set log #6 onto the grate bar as shown. Lay the “Y” end of log #6 onto log #1 resting it into the small depression of log #1.



STEP 8. LOG #7 (SRV703-703): Place log #7 on the grate tine between log #2 and log #5. Rest one end on the burner making sure not to cover any port holes.

F. Glass Assembly

⚠ WARNING

Handle glass doors with care.

- Inspect the gasket to ensure it is undamaged.
- Inspect the glass for cracks, chips or scratches.

- Do NOT strike, slam or scratch glass.
- Do NOT clean glass with a razor blade.
- Do NOT operate appliance with glass door removed, cracked, broken or scratched.
- Replace glass door assembly as a complete appliance.

Removing Glass Assembly

Remove wing nuts and glass clips around glass door.
Remove glass door from the appliance.

Replacing Glass Assembly

Replace the glass door on the appliance.

G. Grilles and Trim

Install optional marble and brass trim surround kits as desired. Marble, brass, brick, tile, or other non-combustible materials can be used to cover up the gap between the sheet rock and the appliance.

Do not obstruct or modify the air inlet/outlet grilles. When overlapping on both sides, leave enough space so that the bottom grille can be lowered and the trim door removed.

H. Shutter Settings

	NG	LP
Twilight-II-B	3/8 in.	Full Open

10 Operating Instructions

A. Before Lighting Appliance

This appliance has an Intellifire ignition system.

CAUTION

If installing Intellifire ignition battery backup:

- Do not install batteries if the backup mode may not be used for extended time.
- Batteries may leak.
- Install batteries only when needed for power outage.

Before operating this appliance have a qualified technician:

- Remove all shipping materials from inside and/or underneath the firebox.
- Review proper placement of logs, rockwool, lava rock, and vermiculite.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position.
- Ensure that the flow of combustion and ventilation air is not obstructed (front grilles and vent caps).



WARNING

Glass door must be in place when appliance is operating.

Risk of:

- Combustion Fumes
- Fire

Do NOT operate appliance with glass door removed.

- Open viewing glass for servicing only.
- Glass door **MUST** be in place and sealed before operating appliance.
- Only use glass door certified for use with appliance.
- Glass replacement should be done by qualified technician.



WARNING

**HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.**



Glass and other surfaces are hot during operation and cool down.

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barrier open or removed.
- Keep clothing, furniture, draperies and other combustibles away.

A protective barrier is provided on the interior door to prevent direct contact with the fixed glass panel. Do NOT operate the appliance without that protective barrier.

Contact your dealer or Hearth & Home Technologies if help is needed to properly install a protective barrier.

WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

B. Lighting Appliance

Intellifire Ignition

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A.** This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. Do not try to light the burner by hand.
- B. BEFORE LIGHTING**, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
 - C.** Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

WARNING:

DO NOT CONNECT 110 VAC TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION:

Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

Do not operate the appliance with panel(s) removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

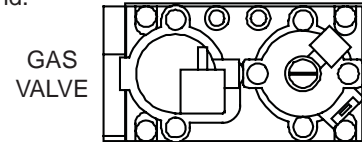
Also Certified for Installation in a Bedroom or a Bedsitting Room.

For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

For additional information on operating your
Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

LIGHTING INSTRUCTIONS (IPI)

1. Turn off all electric power to the appliance.
2. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.



3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you don't smell gas, go to next step.
4. Turn on all electric power to the appliance.
5. To light the burner, flip the ON/OFF switch to the "ON" position. (The ON/OFF switch may include a wall switch if so equipped).
6. If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Turn off all electric power to the appliance if service is to be performed.
2. Flip ON/OFF switch to the "OFF" position.

Final Inspection by _____

593-913D



C. After Appliance is Lit

Initial Break-in Procedure

When you light the appliance, you may notice that it produces heat which does have an associated odor or smell. If you feel this odor is excessive it may require the initial three to four hour continuous burn on high followed by a second burn up to 12 hours to fully drive off any odor from paint and lubricants used in the manufacturing process. Condensation of the glass is normal.



NOTE: The appliance should be run three to four hours on the initial start-up. Turn it off and let it cool completely. Remove and clean the glass. Replace the glass and run the appliance for an additional 12 hours. This will help to cure the products used in the paint and logs.

During this break-in period it is recommended that some windows in the house be opened for air circulation. This will help avoid setting off smoke detectors, and help eliminate any odors associated with the appliance's initial burning.

 WARNING	
	<p>Fire Risk. High Temperatures. Keep combustible household items away from appliance. Do NOT obstruct combustion and ventilation air.</p> <ul style="list-style-type: none">• Do NOT place combustible items on top of or in front of appliance.• Keep furniture, draperies away from appliance.

CAUTION
<ul style="list-style-type: none">• Prevent accidental appliance operation when not attended.• Unplug or remove batteries from remote control if absent or if appliance will not be used for an extended period of time.• Property damage possible from elevated temperatures.

CAUTION
<p>Smoke and odors released during initial operation.</p> <ul style="list-style-type: none">• Open windows for air circulation.• Leave room during initial operation.• Smoke may set off smoke detectors. <p>Smoke and odors may be irritating to sensitive individuals.</p>

 WARNING	
	<p>Fire Hazard. Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.</p> <ul style="list-style-type: none">• Do NOT store flammable materials in the appliance's vicinity.• Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids in this appliance.• Combustible materials may ignite.

D. Frequently Asked Questions

ISSUE	SOLUTIONS
Condensation of the glass	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20 to 40 minutes.
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the appliance.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as gas fireplace glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Is it normal to see the pilot flame burn continually?	In an Intellifire ignition system it is normal to see the pilot flame, but it should turn off when ON/OFF is turned off. In a standing pilot system the pilot will always stay on.

11 Troubleshooting

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician.

A. Intellifire Ignition System

Symptom	Possible Cause	Corrective Action
1. The ignitor/module makes noise, but no spark.	a. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly. Reversed wires at the module may cause system to make sparking noise, but spark may not be present at pilot hood.
	b. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Rod closest to pilot hood should be ignitor. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	c. Ignitor gap is too large.	Verify gap of igniter to pilot hood. The gap should be approximately .17 inch or 1/8 inch.
	d. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF Rocker switch or wall switch in ON position. Hold ground wire about 3/16 inch away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
2. Pilot won't light, there is no noise or spark.	a. Transformer installed correctly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
	b. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness.
	c. Improper wall switch wiring.	Verify that 110/VAC power is "ON" to junction box.
	d. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
	e. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF Rocker switch or wall switch in ON position. Hold ground wire about 3/16 inch away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
3. Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	a. A shorted or loose connection in sensor rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	b. Poor flame rectification or contaminated sensor rod.	Verify that flame is engulfing sensor rod. If the pilot assembly does not have a ground strap, consider installing one to increase flame rectification. Verify correct pilot orifice is installed and inlet gas specifications. Flame carries rectification current, not the gas. If flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high an inlet pressure can cause pilot flame to lift. The sensor rod may be contaminated. Clean sensor rod with emery cloth.
	c. Module is not grounded.	Verify that module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to module.

Symptom	Possible Cause	Corrective Action
3. Continued	d. Damaged pilot assembly or dirty sensor rod.	Verify that ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify connection from sensor rod to white sensor wire. Clean sensor rod with emery cloth to remove any contaminants that may have accumulated on sensor rod. Verify continuity with a multimeter with ohms set at lowest range.
	e. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF Rocker switch or wall switch in ON position. Hold ground wire about 3/16 inch away from "I" terminal on module. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
4. Pilot sparks, but Pilot will not light.	a. Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. W.C.
	b. Ignitor gap is too large.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in.
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.

12 Maintaining and Servicing Appliance

A. Maintenance Tasks

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up at the beginning of each heating season.

WARNING

Risk of injury or property damage.

Before servicing:

- Turn off gas.
- Turn off electricity to appliance.
- Disable remote control, if one is present.
- Ensure appliance is completely cooled.

After servicing:

- Replace any screen or barrier that was removed.
- Reseal and reinstall any venting removed for servicing.

WARNING

Annual inspection by qualified technician recommended.

Check:

- Condition of doors, surrounds and fronts.
- Condition of glass, glass assembly and glass seal.
- Obstructions of combustion and ventilation air.
- Condition of logs.
- Condition of firebox.
- Burner ignition and operation.
- Burner air shutter adjustment
- Gas connections and fittings.
- Obstructions of termination cap.

Clean:

- Glass
- Air passageways, grilles, control compartment
- Burner, burner ports

Risk of:

- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors



CAUTION



Handle glass assembly with care.

NOTE: Clean glass after initial 3-4 hours operation. Longer operation without cleaning glass may cause a permanent white film on glass.

When cleaning glass door:

- Avoid striking, scratching or slamming glass.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when hot.
- Turn off appliance after 3-4 hours of operation and ALLOW TO COOL.
- Remove and clean glass assembly.
- Replace glass assembly and operate appliance for additional 12 hours.

Refer to maintenance instructions.

WARNING



Inspect external vent cap regularly.

- Ensure no debris blocks cap.

- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.



Inspect	Maintenance Tasks
Doors, Surrounds and Fronts	1. Assess condition of screen and replace as necessary. Recommend addition of screen if one is not present.
	2. Inspect for scratches, dents or other damage and repair as necessary.
	3. Verify no obstructions to airflow through the louvers.
	4. Verify maintenance of proper clearance to combustible household objects.
Gasket Seal, Glass Assembly and Glass	1. Inspect gasket seal and its condition.
	2. Inspect glass panels for scratches and nicks that can lead to breakage when exposed to heat.
	3. Confirm there is no damage to glass or glass frame. Replace as necessary.
	4. Verify that latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary.
	5. Clean glass. Replace glass assembly if severely coated with silicate deposits that cannot be removed.
Valve Compartment and Firebox Top	1. Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
	2. Remove any foreign objects.
	3. Verify unobstructed air circulation.
Logs	1. Inspect for broken, damaged, or missing logs. Replace as necessary.
	2. Verify correct log placement and no flame impingement causing sooting. Correct as necessary.
Firebox	1. Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary.
	2. Replace appliance if firebox has been perforated.
Burner Ignition and Operation	1. Verify burner is properly secured and aligned with pilot or igniter.
	2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
	3. Replace ember materials with new dime-size and shape pieces. Do not block ports or obstruct lighting paths.
	4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay.
	5. Inspect for lifting or other flame problems.
	6. Verify air shutter is clear of dust and debris.
	7. Inspect orifice for soot, dirt or corrosion.
	8. Verify manifold and inlet pressures. Adjust regulator as required.
	9. Inspect pilot flame strength. Clean or replace orifice as necessary.
	10. Inspect thermocouple/thermopile or IPI sensor rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
	11. Verify millivolt output. Replace as necessary.
Venting	1. Inspect venting for blockage or obstruction such as bird nests, leaves, etc.
	2. Confirm that termination cap remains clear and unobstructed by plants, etc.
	3. Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained.
	4. Inspect for corrosion or separation.
	5. Verify weather stripping, sealing and flashing remains intact.
	6. Inspect draft shield to verify it is not bent, damaged or missing.
Remote controls	1. Verify operation of remote.
	2. Replace batteries in remote transmitters and battery-powered receivers.
	3. Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.

13 Reference Materials

A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 3.

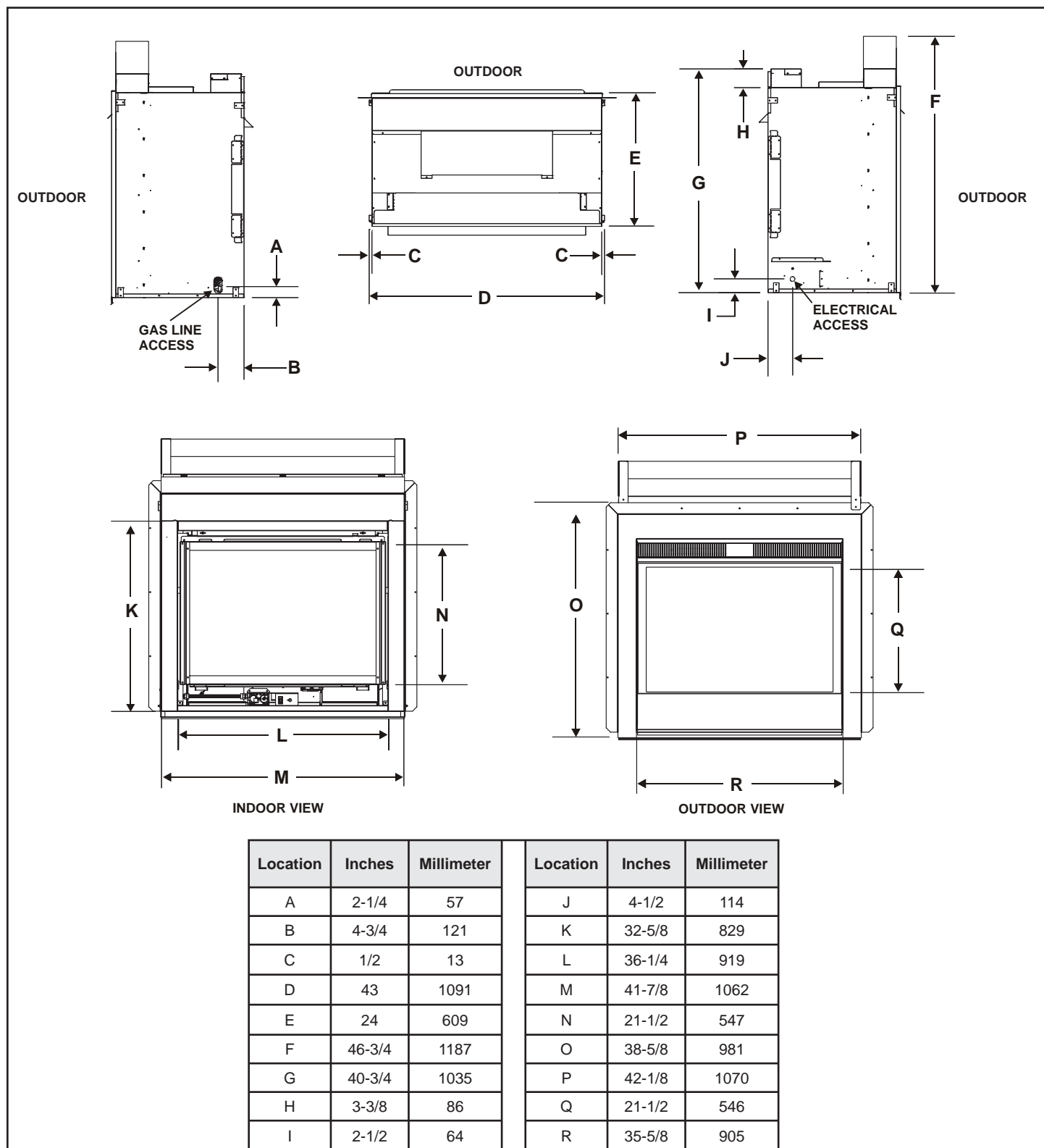
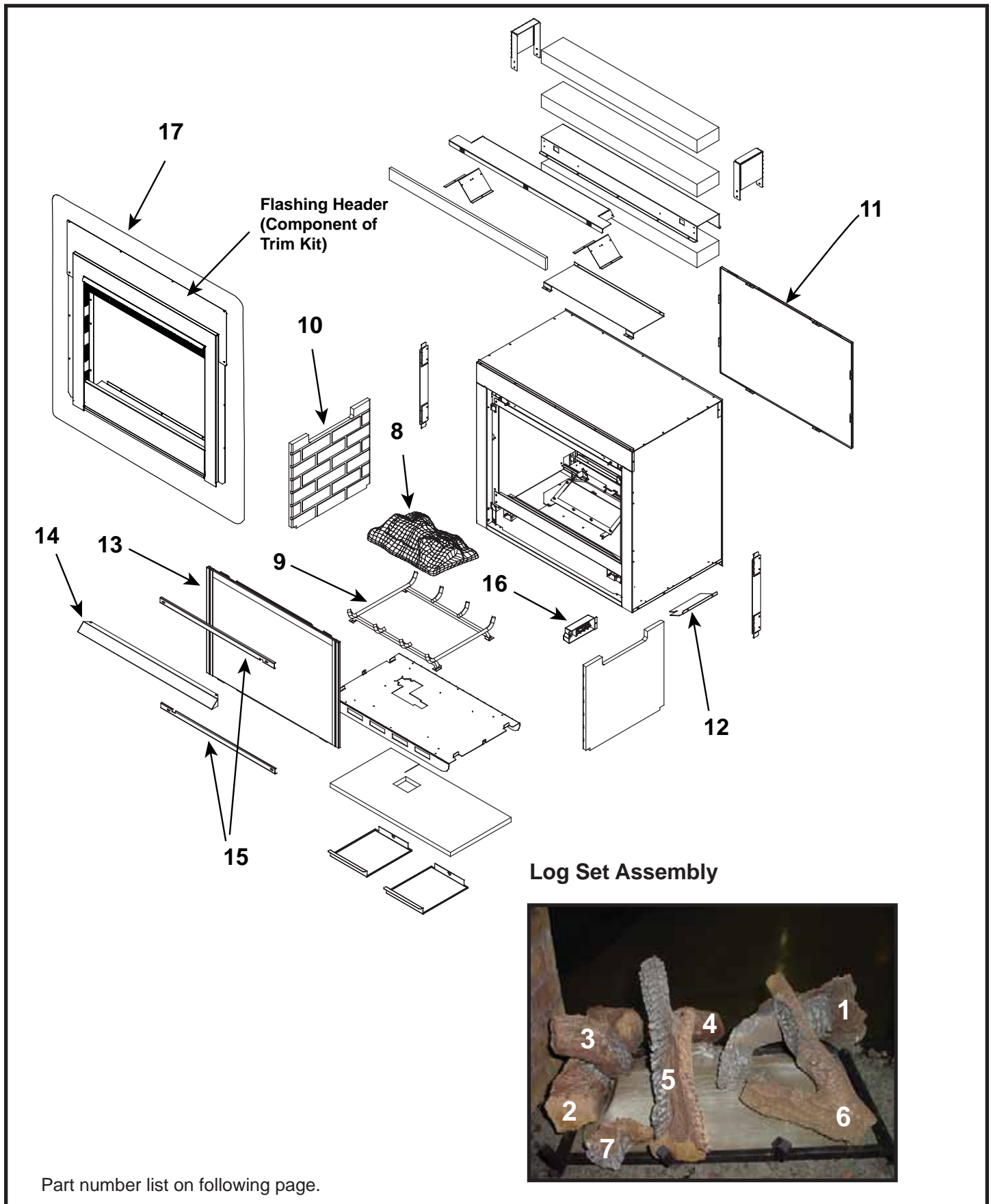


Figure 13.1 Appliance Dimensions



Service Parts List

Twilight-II-B

IMPORTANT: THIS IS DATED INFORMATION. The most current information is located on your dealers' VIP site. When ordering, supply serial and model numbers to ensure correct service parts.

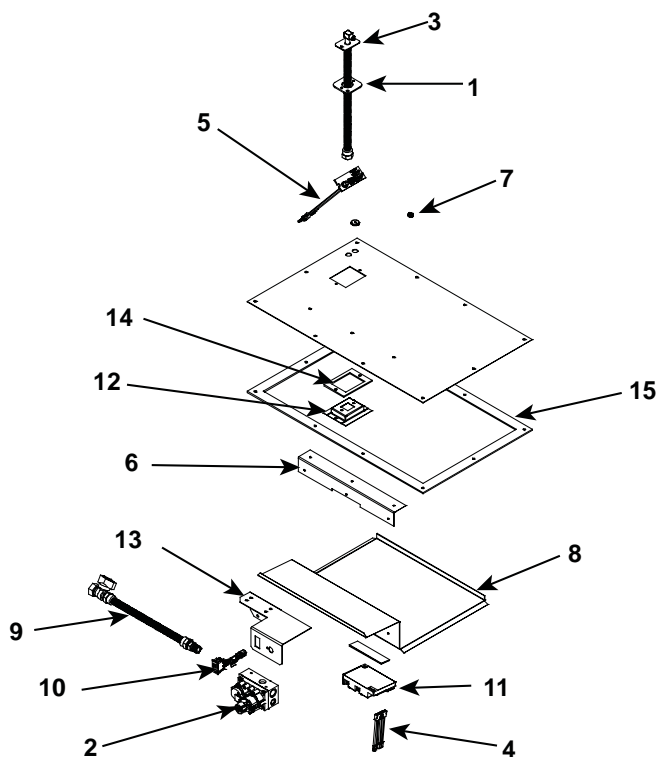


**AVAILABLE
TO SHIP IN
24 HOURS**

ITEM	DESCRIPTION	SERIAL #	PART NUMBER	
	Log Set Assembly		LOGS-TWI	Y
1	Log 1		SRV2005-701	
2	Log 2		SRV2005-700	
3	Log 3		SRV2005-702	
4	Log 4		SRV2005-703	
5	Log 5		SRV2005-704	
6	Log 6		SRV2077-701	
7	Log 7		SRV703-703	
8	Burner Assembly		2087-004	Y
9	Grate Assembly		2005-012	
10	Refractory, Side		SRV2005-730	
11	Outdoor Glass Assembly		GLA-OUTDOOR2	Y
12	Junction Box Shield		2087-149	
13	Indoor Glass Assembly		GLA-6TROC	Y
14	Hood - Interior Side		SRV60-143-BK	
15	Glass Clip		2087-121	
16	Junction Box		4021-013	Y
17	Trim Kit, Black		TL-TRIM-BK	
	Glass Latch Assembly		386-122A	Y
	Non-Combustible Boards (set only)		2108-030	
	Lava Rock Bag		2005-790	
	Mineral Wool		050-721	
	Pilot Tube		446-301	Y
	Touch Up Paint		TUP-GBK-12	
	Conversion Kit NG		NGK-TWI	Y
	Conversion Kit LP		LPK-TWI	Y
	Pilot Orifice NG		593-528	Y
	Pilot Orifice LP		593-527	Y
	Regulator NG		NGK-DXF	Y
	Regulator LP		LPK-DXF	Y

Additional service part numbers appear on following page.

IPI VALVE ASSEMBLY



IMPORTANT: THIS IS DATED INFORMATION. The most current information is located on your dealers' VIP site. When ordering, supply serial and model numbers to ensure correct service parts.



**AVAILABLE
TO SHIP IN
24 HOURS**

ITEM	DESCRIPTION	SERIAL #	PART NUMBER	
1	Burner Neck Gasket		438-407	
2	Valve NG		593-500	Y
2	Valve LP		593-501	Y
3	Flexible Gas Connector		383-302A	Y
4	Wire Assembly		593-590A	Y
5	Pilot Assembly NG		2090-012	Y
5	Pilot Assembly LP		2090-013	Y
6	Valve L Bracket		674-168	
7	Burner Orifice (NG) (#32C)		582-832	Y
7	Burner Orifice (LP) (#50C)		582-850	Y
8	Valve Bracket		2087-117	
9	Flex Ball Valve Assembly		302-320A	Y
10	ON/OFF Rocker Switch		060-521A	Y
11	Control Module		593-592	Y
12	Orifice Bracket		2087-109	
13	Valve Bracket		2087-116	
14	Orifice Bracket Gasket		2087-110	
15	Valve Plate Gasket		2087-112	
	Battery Pack		593-594A	Y
	3V Adaptor		593-593A	Y

C. Limited Lifetime Warranty

LIMITED LIFETIME WARRANTY HEAT & GLO GAS APPLIANCE PRODUCTS



BASIC ONE-YEAR WARRANTY. HEAT & GLO, a brand of HEARTH & HOME TECHNOLOGIES INC., located at 20802 Kensington Boulevard, Lakeville, MN 55044, ("HEAT & GLO") warrants to the original owner that your new HEAT & GLO Gas Appliance (the "Product") will be free from defects in materials and workmanship for a period of one year from the date of installation. During the first year, HEAT & GLO will replace or repair, at its discretion, any defective components at its sole cost and expense, including payment of all reasonable labor costs incurred in replacing or repairing such components. This basic warranty is subject to the conditions, exclusions and limitations described below.

EXTENDED LIFETIME COVERAGE. HEAT & GLO warrants that the firebox, heat exchanger, log(s), and burner will not be defective in material or workmanship during the period the Product is owned by the original owner, subject to the following conditions, exclusions and limitations described below.

CONDITIONS, EXCLUSIONS AND LIMITATIONS:

1. This warranty applies to the original owner only and is nontransferable.
2. This warranty applies only to Products installed in the United States of America or Canada.
3. This warranty is limited to the replacement or repair of defective components or workmanship and HEAT & GLO may fully discharge all obligations under this warranty by repairing or replacing, at its discretion, the defective components. The maximum amount recoverable under this warranty is limited to the purchase price of the Product and, if HEAT & GLO is unable to provide replacement or repair in an expedient and cost-effective manner, HEAT & GLO may discharge all obligations under this warranty by refunding the purchase price of the Product. IN NO EVENT SHALL HEAT & GLO BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY DEFECTS IN THE PRODUCT.
4. Any labor and related repair charges relating to the costs and expenses of replacing or repairing defective components under the Limited Lifetime Warranty are not covered by this warranty, except as provided for under the Basic One-Year Warranty.
5. Components and parts made by other manufacturers, whether sold with the Product or added thereafter, are NOT covered by this warranty unless expressly authorized and approved by HEAT & GLO in writing.
6. Any damages caused by environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other such causes are not covered by this warranty.
7. This warranty will be void if:
 - a) The Product is not installed, operated and maintained in compliance with local building codes and with the instructions in the Installer's Guide, Owner's Guide and Listing Agent Identification Label furnished with the Product.
 - b) Any parts or components made by other manufacturers are added or used in the Product, unless expressly authorized and approved by HEAT & GLO in writing.
 - c) Any service work is performed on the Product by anyone other than an authorized HEAT & GLO representative.
 - d) The Product is damaged due to shipping, improper handling, accident, abuse or misuse.
 - e) Fuels other than those specified in the Installer's Guide and Owner's Guide are used.
 - f) Modification was made to the Product which was not expressly authorized and approved by HEAT & GLO in writing.

EXCEPT TO THE EXTENT PROVIDED BY LAW, HEAT & GLO MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO THE DURATION OF THE WARRANTY SPECIFIED ABOVE.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow exclusion or limitation of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

If warranty service is needed you should contact your installing dealer and if the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HEAT & GLO dealer or supplier.

NOTES TO CUSTOMER:

1. In order to insure proper installation, operation and maintenance HEAT & GLO strongly recommends annual servicing by an authorized HEAT & GLO dealer.
2. Please complete this information and retain this warranty in a safe place for future reference: Installation Date:____
Model #:_____ Serial #:_____ Installing Contractor:_____
3. HEAT & GLO reserves the right to make changes at any time, without notice, in design, material, specifications and prices of the Product. HEAT & GLO also reserves the right to discontinue styles and products.



D. Contact Information



Heat & Glo LifeStyle Collection, a brand of Hearth & Home Technologies Inc.
20802 Kensington Boulevard, Lakeville, MN 55044
www.Heatnglolifestyle.com

Please contact your Heat & Glo dealer with any questions or concerns.
For the location of your nearest Heat & Glo dealer,
please visit www.Heatnglolifestyle.com.

- NOTES -

CAUTION		
	DO NOT DISCARD THIS MANUAL	
<ul style="list-style-type: none">• Important operating and maintenance instructions included.	<ul style="list-style-type: none">• Read, understand and follow these instructions for safe installation and operation.	<ul style="list-style-type: none">• Leave this manual with party responsible for use and operation.

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

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